



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

SECTOR 7 — CHART INFORMATION

SECTOR 7

THE COAST OF NORWAY FROM TRONDHEIM TO BODO

Plan.—This sector describes the outer coast from Trondheim to the approaches to Bodo and Saltenfjorden.

General Remarks

7.1 Winds—Weather.—Weather reports and forecasts are broadcast regularly from shore stations. Warnings of hazardous conditions are also issued when appropriate.

This is an area of frequent changes in barometric pressure which result in frequent change in the direction of the wind. There are frequent depressions in this area.

Fairly large and rapid changes of pressure occur in this area. A change of 24 milibars in 24 hours is relatively common, and a larger 24 hour change is not rare. Also, the actual pressure on a particular day may differ from the average, and on occasions by perhaps 50 millibars.

Since most depressions approach from the Atlantic, and cross N of the area, the most common sequence is that of backing and increasing, followed by veering and decreasing as a depression moves away. The sequence can vary if a depression moves further S over the area or if a polar low move S in a strong N air current in winter.

Because of the rugged topography in this area, strong winds may blow from different directions at places relatively close to each other.

Strong winds outside a fjord may give way to calm weather within, gales may be generated in the fjord or strait through funneling of wind on occasions when winds are light outside. Accordingly, any generalizations made about winds around these coasts must be regarded as subject to large local variations.

In the area of this sector, the average number of days with a percentage of gales, force 8 or above, for the months of November, December, January, and February is 9.8. The months of May, June, July, and August have the least average percentage of gales, force 8 or above, with 1.1.

Fog forms more often over the coast than over the open sea. Coastal fog is more frequent in summer than in winter, and early in the morning than later in the day. Frequency in the summer is more than 5 percent about 2 days a month and from 2 to 5 percent in winter, between 1 and 2 days monthly.

The conditions which favor fog at sea and over exposed coast do not usually favor fog formations inland or in the sheltered inner parts of the fjords. As a result, when there is a widespread fog at sea the inner reaches of land-locked fjords are usually clear and when fog affects the inner reaches there is usually clear weather in the offing.

Tides—Currents.—During fine weather, the flood current sets to the NE and the ebb to the SW. In general the NE current, increased by the prevailing ocean current, is the stronger, especially at a distance of 20 to 30 miles offshore.

In periods of stormy weather the current runs strongly and constantly to the NE when the wind is S or W, and with N or E gales the set is constantly SW, but with less velocity.

Within the fringing islands, the flood current always sets to the NE and the ebb to the SW; here the NE current is also the stronger.

Aspect.—From Halten, a generally steep coast trends about 50 miles NE to Vikna, 3 conspicuous islands close N of the seaward approach to the port of Namsos.

This stretch of coast is fringed with rocky islands, but there are comparatively few off-lying dangers. It is heavily indented by small fjords and inlets which penetrate in all directions, and is remarkably barren except from some cultivation and forests at the heads of the fjords.

This part of the coast can be approached with greater safety than that farther N, but is fully exposed to the SW gales.

From **Nordoerne Light** (64°48'N., 10°33'E.) on the W side of Vikna, the coast trends about 80 miles NNE to Ytreholmen Light. Along this coast off-lying islands and reefs extend, generally, to a distance of 25 to 30 miles from the mainland.

Along this part of the coast the outer rocks and islets are almost without exception, low and without distinctive features, so a vessels position can be determined by bearings of distant objects. The mountains on the larger islands and the mainland possess such striking characteristics and attain such elevations that in fairly clear weather they may be identified at 40 to 65 miles distant. These conspicuous landmarks may be selected to fix the vessels position before the off-lying dangers are approached.

The sea breaks over the outer shoals more readily with W and NW winds, partly because the winds raise the heaviest sea, and partly because the reefs are generally steep-to on their W and NW sides.

Along the coast extending about 100 mile NNE from **Ytreholmen Light** (66°01'N., 11°42'E.) to Bodo, the aspect is bleak and precipitous. There is, however, some low land at the seaward ends of the promontories which separate the fjords.

The off-lying islets and reefs extend from 25 to 30 miles seaward as far N as Traena, a group of islands about 35 miles N of Ytreholmen Light.

North of this group, there is a gradual decrease in the offshore distance of the outer dangers until W of Kunna, a headland some 40 miles NE of Traena, where the distance is about 10 or 11 miles from the mainland.

North of Kunna, the offshore distance again increases; W of Bodo the dangers lie about 20 miles offshore.

The principal fjords within this sector are Bindalsfjorden, Velfjorden, Vefsnfjorden, Ranafjorden, Sjonafjorden, Mel-fjorden, Tjongsfjorden, Skarsfjorden, Sorfjorden, Nordfjorden, Saltfjorden, and Skjerstadfjorden.

In general, the channels leading from seaward to Indreleia are longer and more difficult to navigate than those to the S. In the N part of the sector, the entrances are difficult to make out and a vessel's position must be determined by the peaks on the larger islands and on the mainland.

For details and information concerning the color and bearings of the sector lights mentioned within this sector, see the Light List.

Caution.—Three patches with depths of 16.8m, 19.8m, and 24m, lie, respectively, 5, 6.25 and 7.5 miles, NNE of **Kya** (64°28'N., 10°13'E.).

Trondheim to Buholmrassa

7.2 The portion of Indreleia leading N from Trondheim and **Grandevika** (63°41'N., 9°29'E.) to Buholmrassa requires exact knowledge to avoid the shoals close to the fairway, which in some places is reduced to a width of only 46m; because of this, only an outline of the routes is given.

Between **Valsoya** (63°52'N., 9°44'E.), an island, and Stokkoya, an island about 13 miles NNE, the fairway is quite narrow in places, but from abreast the S end of Valsoya large vessels can take an outer, and broader, channel known as Asenleia, which rejoins Indreleia in the fairway N of Stokkoya.

The inner channel passes W and N of Valsoya, through the narrow channel between Skjoroya and Lysoya, then E of Leikua, 1.5 miles N of Lysoya, and W of Lauvoy.

Linesfjorden, entered NW of Lauvoy, may be navigated by large vessels, and Stokksundet, between Stokkoya and the mainland, may be used by vessels of about 6.1m draft; however, there is a sharp turn E of Stokkoya.

Stokken, which separates the NE side of Stokkoya from the mainland, is deep and free from dangers in the fairway; it leads 2.5 miles NW from Stokksundet to the junction with Asenleia.

Asenleia lies between Hosenoyan, on the W, and Linesoya, Stokkoya, and the mainland, on the E. Indreleia, N of the junction of Stokken and Asenleia, is deeper and wider than farther S.

7.3 Marflessa Light (64°10'N., 10°08'E.), situated on an islet about 5 miles NE of the junction of Stokksundet and Asenleia, may be passed on either side. Kjeoya lies on the W side of the fairway, 2 miles NNE of Marflessa Light, and is passed on its E side. A light is situated on the SE extremity of Kjeoya. Northeast of Kjeoya, the track passes W of **Terningen Light** (64°13'N., 10°15'E.) and then farther N toward Borova.

Kaurleia leads into this part of Indreleia from seaward, passing N of **Kaura** (64°14'N., 10°08'E.); this entrance is difficult and local knowledge is necessary.

Boroya (64°16'N., 10°17'E.) lies with its S extremity about 1.75 miles NE of Terningen Light. Indreleia leads between Boroya and the mainland, and then proceeds N passing E of the Skjervoyan group. From the Skjervoyan group, the track leads E of Ramsøya and then E of the Rodøya group, farther N.

Saksa Light (64°24'N., 10°26'E.) lies on the W side of Indreleia, at the S entrance to Buholmrassa; a lighted buoy is situated about 250m E of Saksa Light; a patch with a charted depth of 7.9m lies in the fairway 90m NW of this light. Lights in range, situated on the W side of Søndre Rodøya, lead through the S entrance to Buholmrassa.

Buholmrassa can be navigated by large vessels, but the channel is narrow and is considered to be one of the most difficult to transit, in bad weather, on the Norwegian coast.

Buholmrassa Light (64°24'N., 10°27'E.) is shown from a tower, 23m in height, standing about 1 mile E of Saksa Light. A racon is located at the light.

Langro Light (64°29'N., 10°30'E.) is shown from a tower standing about 5 miles NNE of Buholmrassa Light and 7.5 miles ENE of Kya. The tower is equipped with a racon and is located on the SE side of Grunnane, a group of dangerous rocks and islets.

Grandevika to Folla

7.4 Between Grandevika and Folla, about 65 miles N, numerous small fjords lie E of Indreleia. In general, the fjords have no significant ports.

Bjugnfjorden, the fjord next N of Grandevika, leads E from Indreleia and extends about 7 miles from **Bjugnskjaer Light** (63°46'N., 9°33'E.), its N entrance point.

An islet fringed on its S side by foul ground, lies 2.75 miles E of the light.

Bjugnfjorden may be entered from the SE part of Frohavet.

Tarvfjorden (63°46'N., 9°25'E.) separates Tarva from the mainland, and lies in a NE and SW direction. It is entered between Gyltingtarren, off the S extremity of Tarva, and Bjugnskjaer Light, 5 miles E.

Torskjaer Light (63°46'N., 9°28'E.), is situated in the S part of Tarvfjorden, 2.5 miles W of Bjugnskjaer Light. The fjord is divided by foul ground running in a SSW-NNE direction.

The W part of the fjord, between the foul ground and Tarva, should not be entered without local knowledge. Indreleia leads through the E part of the fjord, between the foul ground and the mainland.

Valsfjorden extends 2.5 miles NE from its entrance between **Valsholmskjaer Light** (63°49'N., 9°36'E.) and the foul ground about 0.5 mile S. It is reported that a racon is located at Valsholmskjaer Light.

The fjord is free from dangers in the fairway. Lauvoyfjorden, about 10 miles NE of Valsholmskjaer Light, on the SE side of Indreleia, leads into Afjorden E and Skrafjorden NE. Vessels with local knowledge can enter the fjord from Indreleia when NE of **Skjelholmen** (63°54'N., 9°51'E.). Afjorden extends 8 miles in a general NE direction from its junction with Lauvoyfjorden. It has depths of 80m but there are isolated shoal patches in the fjord.

Skrafjorden, entered from Lauvoyfjorden, extends about 5 miles NE from abreast the S end of **Lauvoy** (63°56'N., 9°56'E.). It is foul and should only be entered by small vessels with local knowledge.

7.5 Linesfjorden is formed between the dangers SSW of **Linesoya** (64°01'N., 9°54'E.), and Linesoya on the NW and the mainland on the E. Indreleia passes through this fjord from SSW to NNE. The track passes over a charted depth of 7.9m in the S part of Linesfjorden.

Skjorafjorden (64°06'N., 10°10'E.), about 6 miles NE of Linesfjorden, is entered from Indreleia, and is deep and free of dangers in the fairway, with the exception of a 3m shoal lying about 2 miles within the entrance. A 10m patch lies 0.35 mile SE of the shoal.

The fjord extends about 2 miles SE and then continues about 2.5 miles NE.

Anchorage is available, in depths of 20 to 23m, sand and clay, in a cove extending SSW from the S extremity of Skjorafjorden. Foul ground lies in the vicinity of the anchorage.

Brandsfjorden, situated 3 miles E of **Kaura** (64°14'N., 10°08'E.), is entered N of Terningen. The fjord extends 5 miles SE and S and is deep and free from dangers.

Kaurleia leads from seaward in a SSE direction toward Kaura and joins Indreleia ESE of that islet.

Svefjorden (64°23'N., 10°30'E.) is entered from Indreleia close S of the S entrance to Buholmråsa. It extends 5 miles ESE and is deep and fairly clear of dangers. There is little traffic in the fjord.

Folla—Namsfjorden

7.6 Folla is the body of water extending between the S rocks of Vikna and the mainland S; it is entered between **Buholmen** (64°25'N., 10°26'E.) and Nylandskjeret, marked by a light, 12 miles N.

Folla gives access at its E end to Namsfjorden and the port of Namsos, to Foldfjorden, and to Naerøysundet and the port of Rørvik.

The passage outside Folla has particularly severe weather; the seas go straight towards the coast when the winds are from the WNW.

The passage is very deep immediately outside the coastline and reflections against the steep continental shelf may be one of the reasons for the turbulent seas. In combination with outgoing current, this may possibly be one of the reasons that the seas are particularly heavy W of the shoals.

The open sea passage across Folla, from Bulholmråsa to Naerøysundet, forms part of Indreleia.

Kya (64°28'N., 10°13'E.), an isolated islet marked by a light, is an excellent mark in the approach to Folla.

Some of the mountains are visible from the vicinity of Kya for a distance of 45 miles SSW and as far as 60 miles NE.

Halsfjell (64°19'N., 10°E.), 13.5 miles SE of Kya and 504m high, is seen as a prominent mountain with a deep cleft, and a large round hummock S of the cleft. Helvikkeipen, 3.5 miles NNW of Halsfjell, is 347m high, it is identifiable by its prominent location on a peninsula, with a fjord on either side.

Oksbasheia (64°25'N., 10°31'E.), 8.5 miles ESE of Kya and 228m high, is prominently situated on a peninsula. Nesvagklubben, consisting of two hummocks about 103m high, rises in the SW part of the same peninsula.

The tidal current seaward of Namsfjorden sets W with the falling tide and E with the rising tide. The direction, however, is greatly affected by the wind and at times the velocity is fairly strong.

The islet of Kya lies in the S approach to Namsfjorden. On the N side of the fairway, about 15 miles NNE of Kya, is **Nylandskjeret** (64°41'N., 10°33'E.), which consists of several rocks.

Hilleroen (64°46'N., 10°25'E.), covered by 2.7m, always breaks. It is the farthest W of the shoal patches off Vikna and lies 5 miles NW of Nylandskjeret.

Klakken, a 16.7m patch, lies about 2 miles W of Nylandskjeret.

7.7 Sveskallen (64°33'N., 10°15'E.), with a least charted depth of 16.8m, lies 5 miles N of Kya Light. Ostvikklakken, a 19.8m patch, lies 1.75 miles ENE of Sveskallen; Skillengen, a 24m patch lies 1.25 miles farther NE. These three patches break and the area should be avoided.

Kya, situated about 5 miles seaward of the dangers to the S, affords a good landmark when approaching Folla from the SW. From abreast this islet course, should be shaped to pass about 2 miles NW of the islets and dangers lying off the mainland in the approach to Namsfjorden.

When approaching Folla from N, a wide berth should be given to the dangers lying off the W side of Vikna; course should be shaped to pass S of **Klakken** (64°40'N., 10°27'E.).

After clearing Klakken, course should be adjusted to pass 1 mile NW of **Bjorøyvaer** (64°36'N., 10°48'E.), lying 18 miles NE of Kya. Continue NE and pass S of Sorhunden, a small islet 3.75 miles NNE of Bjorøyvaer, then steer SE and enter Namsfjorden, W of Otterøya.

7.8 On the S side of Folla is a large indentation in the mainland, in which are the islands of Otterøya, Joa, and Elva.

The fjords which separate these islands have distinctive names. They are collectively known as Namsfjorden, but the fjord which leads W of Otterøya to Namsos is the one to which the name is specifically assigned.

Namsfjorden is entered between **Knapholmene** (64°36'N., 11°02'E.), an islet off the W end of Otterøya, and the mainland 1 mile W.

The fjord, which is deep throughout, with an average width of 1 mile, leads 18 miles SE to the port of Namsos.

Tides—Currents.—From the entrance of Namsfjorden to Finsneset, 3.5 miles SE, the tidal currents can be quite strong.

Pilotage.—The services of a State Pilot in the Namsos area can be arranged through the harbor authority at Trondheim.

Mefaldtaren (64°37'N., 11°00'E.), a 14.9m patch, lies about 1 mile NNW of the light on Knapholmene; Svarttaren, a 2.4m patch, lies 2.5 miles WNW. Foul ground extends 0.25 mile from the mainland, 0.8 mile WSW from the light.

Finsneset, marked by a light, is located on the W side of Namsfjorden, 3 miles SSW of Knapholmene; it rises to a height of 151m, 0.25 mile inland.

Anchorage is available, in 23 to 32m, sand, off Lovika on the W side of Namsfjorden, 1 mile SSW of Finsneset.

During bad weather from SW of Folla, large vessels seeking shelter anchor SE of **Krokvik** (64°31'N., 11°04'E.), in the SW part of Leirfjorden, 3 miles SSW of Finsneset, in depths of 40 to 44m, clay.

7.9 Hoddøya (64°28'N., 11°14'E.), an island which rises to a height of 208m on its W side, is located on the W side of Namsfjorden, about 9 miles within its entrance. Hoddøyrgrunnen, a 1.5m patch, lies 0.25 mile off the N side of Hoddøya.

Shoal water extends about 0.1 mile off the NE extremity of Hoddøya. Namsfjorden is about 0.7 mile wide in this area.

Bromsneset Light stands on a point in Otterøya, E of Hoddøya. A series of islands lies on the S side of the fairway from 1 to 2.75 miles ESE of the light.

Ansneset (64°28'N., 11°24'E.), the S point of Otterøya, has a drying spit extending about 0.2 mile S from it. A rocky shoal,

covered by less than 1.8m, lies on the S side of the fairway, 1 mile S of the point.

Maerranes, a promontory on the mainland, lies 1.5 miles SE of Ansneset. Namsos is situated 1.25 miles NE of Maerranes.

Vessels in transit to Namsfjorden steer a mid-channel course until abreast of Hoddoya. Shape a course to pass N of Hoddoygrunnen, then between Hoddoya and Otteroya.

The white sector of Bromsneset Light bearing between 286° and 293°, astern, leads clear of the dangers until SW of Ansneset, when a course should be shaped to pass S of Maerranes, then NE to Namsos.



Namsos

Namsos (64°28'N., 11°30'E.)

[World Port Index No. 23050](#)

7.10 Namsos is a coastal harbor situated on the N side of Namsfjorden.

Ice.—The harbor is well sheltered and cargo operations are seldom interfered with. Navigation is seldom impeded by ice except during exceptionally severe winters, when entrances may be blocked; the port is kept open by icebreakers.

Tides—Currents.—The spring range of tide is 2.7m.

Strong tidal currents may be experienced in Namsos. The flow is affected by the outflow from Namsenelva, the shallow water area E of Namsos, and can cause difficulty in berthing.

Depths—Limitations.—The quays of Namsos are situated around a small bay. The older part of the town, including the railway station and the church, occupies the E side.

The principal berths vary in length from 50 to 150m, with depths of 5 to 9m alongside. Vessels of up to 15,000 dwt can be accommodated.

There are three oil berths, with depths of about 5m alongside. Coastal tankers up to 2,000 dwt can be handled.

Pilotage.—Pilots board 1 mile NNW of Grip Light, but if heavy swell is present, vessels may be directed into smooth water by the pilot boat. Contact the pilot office by VHF at Kristiansund.

Anchorage.—There is a good, spacious anchorage available in the harbor, in depths of 50 to 60m. Anchorage is available closer in, in depths of 18 to 42m.

7.11 Lyngnenfjorden is entered from Namsfjorden and extends about 9 miles SSE from its entrance between Skjerpoya on the W and Kvarvødden, 1.5 miles E.

Bangsund Light (64°25'N., 11°21'E.) is situated on an islet on the E side of the fjord 1.5 miles S of Skjerpoya.

On each side of the entrance to the fjord are several dangers, whose positions may be seen on the chart. The white sectors of Bangsund Light lead clear of the dangers lying 0.25 mile E of Skjerpoya.

Anchorage, in 10 to 19m, mud, with mooring rings, is available off Bangsund, 1 mile SE of the light.

Lokkaren, Surviksundet, Lauvoyfjorden, and Rodsunda

7.12 Lokkaren, Surviksundet, Lauvoyfjorden, and Rodsunda lead N from Namsfjorden, along the E and NE sides of Otteroya, to join Folla N of Otteroya.

Lokkaren (64°30'N., 11°26'E.) is entered E of Ansneset and extends 3.5 miles N, along the E side of Otteroya, to its junction with Surviksundet, in the vicinity of Levra.

A bridge, with a vertical clearance of 30m, spans the fairway 2 miles within the entrance. A depth of 4.9m is charted close S of the bridge. Lokkaren may be entered within the white sectors of the light situated on the W side of the fairway 0.75 mile NNE of its S entrance. Another white sector of this light, astern, leads farther NNE.

Levra Light (64°32'N., 11°28'E.) changing from red to green leads W of the 4.9m patch S of the bridge.

Surviksundet (64°33'N., 11°24'E.), a narrow sound lying between Otteroya on the SW and Elva and Hooya on the NE, connects Lokkaren with Lauvoyfjorden. The sound is spanned by several overhead cables, the lowest having a vertical clearance of 30m.

An 8.8m patch lies in the NW entrance of Surviksundet; otherwise it is clear of dangers.

Levra Light, bearing 124° astern, changing from red to green, leads through the middle of the sound, to Kraka, foul ground extending 160m NE from Otteroya, 2.75 miles NW of the light. From Kraka, the white sector of the light situated on Lauvoy leads into Lauvoyfjorden; however, the 8.8m patch lies within this sector.

7.13 Lauvoyfjorden (64°35'N., 11°20'E.) lies between Otteroya and Joa on the W and Elva on the E; it is mostly clear of dangers and is well marked.

Lauvoytaren (64°33'N., 11°20'E.), a 3m patch, lies 0.5 mile SW of the SW point of Elva. Lauvoy, a small islet, is located 0.3 mile W of the SW point of Elva. Foul ground extends 0.2 mile N from the islet; a 4m patch lies 0.6 mile N.

Lyngholmen (64°35'N., 11°24'E.) lies in the middle of the fjord, 0.8 mile N of Lauvoy; a drying patch lies 183m N.

Vessels which have entered Lauvoyfjorden from Surviksundet, pass W of Lauvoy, and steer with the white sector of that light, astern, which leads into the SW part of Rodsunda.

Anchorage may be taken off Fosslandsosen, in the SW part of Lauvoyfjorden, in 44m, clay.

Rodsunda (64°38'N., 11°10'E.) is formed between Otteroya, on the S and W, and by Joa on the E; it is about 6 miles from its

junction with Lauvoyfjorden to its NW entrance. The fairway is mostly clear of dangers.

Holviktaren (64°36'N., 11°18'E.), a 1m patch, lies 0.15 mile offshore, 0.6 mile NW of Holvikneset, the S extremity of Joa.

Stonga, drying, lies at the extremity of a spit extending 0.5 mile from Joa, at the NW entrance to Rodsunda.

Vessels which have entered Rodsunda from Lauvoyfjorden steer a mid-channel course and pass E of **Jervika Light** (64°38'N., 11°09'E.), close within the NW entrance point. The white sector of Jervika Light, astern, leads W of Gauvene into Folla.

7.14 Gyltefjorden (64°39'N., 11°22'E.) is entered between Skreddarneset, the NE point of Joa and Storhovedet, 2.5 miles NE, and leads 3.5 miles S to the entrance to Seirstadfjorden and Nordsunda. The fjord is deep and clear of dangers.

A mid-channel course will lead SSW to the entrance to Seirstadfjorden.

Anchorage may be taken, in 20 to 24m, clay, in Movika, close within the N entrance to Gyltefjorden, on the E side.

Seirstadfjorden (64°37'N., 11°22'E.) is entered W of Olhammeren, the N point of Elva, and leads 2.5 miles S into Lauvoyfjorden. An overhead cable, with a vertical clearance of 45m, spans the fjord in the vicinity of the light on Olhammeren.

Shoal water extends up to about 0.2 mile off the E side of Joa, which reduces the fairway to about 0.2 mile in places.

Nordsunda and Arbustraumen, which separate Elva from the mainland, lead SSE from Gyltefjorden and connect with the various fjords E of Elva.

Nordsund and Arbustraumen, especially the latter, are frequently difficult and even dangerous to navigate, due to the strong tidal currents and to the squalls which come off the high land E. These channels, which can be used only by small vessels, are not recommended in the absence of good local knowledge.

Foldfjorden

7.15 Follfjorden is entered at the inner end of Folla and extends 25 miles ENE towards the entrances to Opployfjorden, and Indre Foldfjorden.

Flottra (64°40'N., 11°04'E.), an island marked by a light, is situated at the E end of Folla, just over 1 mile N of Otteroya.

Foul ground extends about 0.4 mile W and 0.3 mile N and E from the island.

Stokkgrunnen (64°39'N., 11°00'E.), a dangerous drying reef, lies in the middle of the fairway, 2 miles SW of Flottra.

Smatarene, a patch with a depth of 11.9m, lies 0.5 mile NE of Flottra; isolated patches, with depths of 9.8m and 9.1m, lie, respectively, 0.3 and 0.75 mile, N of Flottra.

Tarnfallene, islets and rocks which usually break, lies on the S side of the approach to Foldfjorden, 2 miles E of Flottra.

Vessels approaching Foldfjorden from Folla can pass on either side of Stokkgrunnen and then SE of Flottra. Then shape a course to enter the white sector of **Abelvaer Light** (64°43'N., 11°10'E.), 4 miles NE of Flottra.

When N of Tarnfallene, shape an ENE course to pass about midway between **Mefallstaren** (64°46'N., 11°29'E.), awash,

and Kvalholmen, 1.25 miles SE. When clear of Mefallstaren, steer E toward Opployfjorden.

Opployfjorden (64°48'N., 11°45'E.), the E continuation of Foldfjorden, is entered between **Digermulen** (64°47'N., 11°43'E.) and Galtnesodden, 0.75 mile NE and extends 3.5 miles E to Salsbruket.

Galtnesskjaer Light is situated on a rock which lies in the entrance to Opployfjorden.

The fjord may be entered by passing N or S of Galtnesskjaer Light, then E with the white sector of that light astern, passing S of the island about 1 mile E.

Steer to pass N of Garsoya, just over 1 mile farther E, then N of Opployskjeret, 0.2 mile E of Garsoya, then directly to Salsbruket.

7.16 Salsbruket (64°48'N., 11°52'E.) stands on the N side of the head of Opployfjorden, 0.5 mile ENE of Opployskjeret. Salsbruket Church, situated 0.5 mile W of Salsbruket is floodlit and makes a good landmark. The harbor is good, but winds can be troublesome.

The export quay is 70m long and has depths of 7.5 to 9.2m alongside. Vessels of 1,000 to 3,000 grt regularly use the quay; vessels of 10,000 grt have berthed there but have only been partly loaded.

Anchorage is available off the quays, in 25 to 30m, sand and clay.

Indre Foldfjorden (64°53'N., 11°44'E.) is connected to the NE end of Foldfjorden through Korsnesstraumen, a narrow sound. From the N end of Korsnesstraumen, Indre Foldfjorden extends ENE 13 miles, then SE for 10 miles.

Korsnesstraumen and Indre Foldfjorden are mostly clear of dangers but are narrow in places. Korsnesstraumen is navigable without difficulty, even though the tidal currents run strongly in it.

Indre Foldfjorden is narrowest at Foldereidstraumen, about 16 miles ENE of the S entrance to Korsnesstraumen; large vessels should not pass it without a pilot or a local mariner on board.

Korsnesstraumen is entered between **Falskeneset** (64°50'N., 11°39'E.), a headland, and a point 0.35 mile WNW.

The white sector of **Kjeoy Light** (64°48'N., 11°35'E.), astern, leads into the fairway of Korsnesstraumen. A mid-channel course leads N through Korsnesstraumen to Indre Foldfjorden; the sound is spanned by an overhead cable, with a vertical clearance of 45m.

7.17 Kvalbaks kjær Light (64°52'N., 11°41'E.) is situated at the extremity of a spit which extends 0.15 mile W from the mainland, at the entrance to Indre Foldfjorden; the fairway passes W and N of this light. The fjord is spanned by overhead cables, with a vertical clearance of 43m, 1 mile NE of the light.

The white sector of **Skaftenes Light** (64°57'N., 12°01'E.) leads from the vicinity of the overhead cables above to within about 1 mile of the light. Steer a mid-channel course to pass S of Skaftenes Light; then steer in the white sector of that light, astern, which leads N of Ahamaren, a point 2.5 miles ENE of the light.

A 5m patch lies on the S side of the fairway 0.75 mile ENE of Ahamaren. There is a light situated on shore N of Ahamaren; the white sector of this light, astern, leads N of the

5m patch. From this area SE to the head of the fjord, passage should not be attempted without local knowledge.

Kongsmoen (64°53'N., 12°26'E.), situated at the head of the fjord, 9.75 miles SE of Ahamaren, is the site of a quay, 50m long, with depths of 9.2 to 10.3m alongside.

Anchorage can be obtained, in charted depths of 49m, off Kongsmoen.

Arnoyfjorden (64°46'N., 11°15'E.) lies ENE of Tviberg and may be entered by passing either N or SE of the island; the SE side, however, is preferred. A 4m rocky shoal lies on the SE side of the fairway, about 1 mile ENE of the S point of Tviberg.

Naeroysundet

7.18 Indreleia crosses Folla in open sea for a distance of 20 miles, then leads through **Naeroysundet** (64°50'N., 11°11'E.) between Indre Viken on the NW and Naeroya, Maroya, and the mainland on the SE.

Tidal currents in Naeroysundet are NE on the flood current and SW on the ebb current. The spring rate in each direction is 3 knots off the W side of Maroya and 4 knots off the E side of Stromoya.

The group of shoals which separates the NW side of the entrance to Foldfjorden from the SE side of the approach to Naeroysundet includes the following salient dangers; the positions are given from the islet **Sorhunden** (64°39'N., 10°53'E.):

1. Bondfallet, a 4.6m patch, lying 1.5 miles NW.
2. A 2m patch lying 1.75 miles NNW.
3. A 5.8m patch lying 2 miles NNW.

Gjeslingene Light (64°44'N., 10°51'E.) is situated on the NW side of the approach to Naeroysundet, 4.75 miles N of Sorhunden. A racon is located at the light tower, which is 24m in height.

Grinna Light is situated about 3.75 miles ENE of Gjeslingene Light.

Finskjerane, a group of rocks partly awash, extends NE from Grinna Light. Spygrunnsfallet, awash, lies on the E side of the fairway, 1.5 miles ESE of the light.

Naeroysundet is entered between **Finskjerslua** (64°46'N., 11°00'E.), at the E extremity of Finskjerane, and Spygrunnsfallet.

Naeroysund Light stands on the NW side of Naeroysundet, 7.75 miles NE of Grinna Light. A bridge, with a vertical clearance of 41m, stands 0.8 mile NE of Naeroysund Light.

Vessels approaching Naeroysundet should adjust course to pass about 1 mile SE of Gjeslingene Light, then pass 0.7 mile SE of Grinna and continue NE into Naeroysundet, and in mid-channel to Rorvik.

7.19 Rorvik (64°52'N., 11°14'E.) ([World Port Index No. 23040](#)) is a resort and fishing harbor protected by moles. The entrance is about 50m wide. The harbor is separated into two parts by a peninsula situated in Indre Vikna at the NE end of Naeroysundet.

Winds—Weather.—Strong SW winds raise a considerable sea, sometimes making the quays untenable. Southeast winds can bind vessels to many of the quays.

Depths—Limitations.—The quays are up to 143m in length and have depths of 7.3 to 8.8m alongside. Other quays are from



Rorvik

10 to 60m in length and vary in depth from 2.2 to 8.2m. Vessels up to 1,000 dwt can be accommodated.

Pilotage.—The harbormaster undertakes harbor pilotage if required; there are no duty pilots.

Regulations.—The harbor area of Rorvik extends from Naeroysund Light, 1.5 miles SW of Rorvik, to Haganes Light, 1.5 miles NE of Rorvik, including the waters on the N side of Maroya.

Within the harbor area, powered vessels must not proceed at a greater speed than necessary for good seamanship and maneuverability. Cautionary notice boards are placed at the SW and NE limits of the harbor area.

Rorvik to Risvaerjorden

7.20 Indreleia continues from Rorvik to Risvaerfjorden, 12 miles NE, between Indre Vikna, **Stromoya** (64°52'N., 11°16'E.), Krakoya, Lauvoya, Gjerdingen, and **Risvaer** (64°55'N., 11°32'E.) a group of islets, on the NW, and Kvingla and the mainland on the SE, passing either side of Svinoya.

A light is situated on the SE point of Stromoya; a 4m patch, marked on its W side by a lighted buoy, lies 0.25 mile NE of the light.

The tidal flow off the 4m patch above is 4 knots at springs tide. It is 3 knots off Krakoya, 1.25 miles NNE.

Humulrasa Light (64°55'N., 11°22'E.) stands on the SW point of Svinoya. The following features positions are given from this light:

1. Krigsborgene Islets, lying about 1 mile SW, on the NW side of the fairway.
2. Krigsborntaren, a rock marked by a light, lying 0.8 mile SW.
3. A light standing on the E coast of Svinoya, 0.7 mile NE.
4. A light standing on Valhaugen, on the NW coast of Kvingla, 0.7 mile ENE.

A light is situated on **Gjerdinggalten** (64°56'N., 11°28'E.), on the NW side of the fairway, SE of Gjerdingen. A light is situated on Stangholmgalten, on the SE side of the fairway, 0.4 mile E of Gjerdinggalten.

Vessels proceeding N from Rorvik and vicinity, pass E of Stromoya and W of the 4m patch, and then in mid-channel, passing E of Krakoya about 1 mile NNE of Stromoya. The white sectors of the charted lights lead clear of the dangers.

The main fairway E of Stromoya has been used by vessels of 20,000 grt with a draft of 10m. Larger vessels can pass if assisted by tugs. Large vessels should only use this channel during the period of slack water.

The narrow channel W of Stromoya, in which the least charted depth is 7m, can be used by vessels up to 1,200 grt.

Powered vessels should observe the speed as required for Rorvik. When the vessel has cleared Krakoya and **Krigsborn-taren** (64°54'N., 11°20'E.), 1 mile NE, course may be shaped to pass either E or W of Svinoya.

Svinestien, the passage between Svinoya and Kvingla, may be entered with the light on the NW coast of Kvingla, bearing between 051° and 059°; steer to clear the light, then bring it astern to bear between 227° and 231°, which will lead NE between Gjerdinggalten and Stangholmgalten.

7.21 Humulrasa (64°57'N., 11°23'E.) is entered off the NW side of Indreleia, N of Svinoya, and leads N between Lauvoya and Gjerdingen into the open sea.

Indre Haugoytaren (64°56'N., 11°22'E.), a 6.3m patch, lies 1 mile N of the SW point of Svinoya. A 6m patch lies 0.3 mile W of Indre Haugoytaren.

Range lights are situated on Lamholmen, off the NW coast of Gjerdingen.

The recommended route through Humulrasa passes close E of Indre Haugoytaren, with the white sector of Humulrasa Light astern. When clear of Lamholmen, vessels may proceed to the open sea or NE toward Lekafjorden and Indreleia.

Risvaersundet (64°58'N., 11°31'E.) is a much-used passage which extends NNE from **Oteren** (64°58'N., 11°31'E.), located 1.75 miles NE of Gjerdinggalten, and leads between Blikoya, Kalvoya, Skarvholmen, Hamneholmen, and Leroya on the W and Risvaer, Risvaeroya, and Stensoya on the E.

Oterholmflakket, a 3m patch, lies 0.25 mile WSW of Oteren. Patches of 6 and 8m lie between Oterholmflakket and Oteren.

Risvaersundet may be entered either between Oterholmflakket and Oteren, where the least depth is 6m, or E of Oteren in deeper water. The white sector of the light on Risvaer will lead in the fairway NNE, E of Blikoya.

Steer to pass W of the light, then bring it astern bearing between 209° and 215°. After passing clear of Leroya, course may be altered WNW into Risvaerfjorden or NE into Dolmsundet.

7.22 From **Stangholmgalten** (64°56'N., 11°28'E.), Indreleia leads close off the mainland, passing SE of Oteren and Store Oterholmen, 0.3 mile NE, and then 183m W of Eiternestangen which is situated 4 miles ENE of Stangholmgalten, then NNE into the E end of Risvaerfjorden.

Risvaergalten, rocks partly awash and marked by a beacon, lies 1 mile NE of Oteren. A 2m patch lies 0.2 mile farther NNE.

Ivarholmen, marked by a light, Lamholmen, Drenken, and Bardskjeret lie across the passage between Risvaer and Eiternestangen.

From the vicinity of Stangholmgalten, the white sector of that light, bearing between 230° and 238°, astern, leads SE of **Store Oterholmen** (64°58'N., 11°32'E.). From a position 0.2 mile SE of Oteren the fairway leads NE between Eiternestangen and Bardskjeret, taking care to avoid the 7m patch, 0.15 mile NE of Bardskjeret and **Hornbaen** (64°59'N., 11°35'E.), rocks, partly awash, about 0.6 mile NNE of Bardskjeret.

When the vessel has cleared the passage E of Bardskjeret, steer NW into Risvaerfjorden, passing SW of Hornbaen, or midway between Hornbaen and the mainland, then NE into Dolmsundet.

Folla to Ytterholmen

7.23 Sklinna Banken (65°16'N., 10°10'E.), an extensive bank with general depths of less than 183m, and a least charted depth of 121m, lies with its center about 21 miles WNW of Sklinna.

Sklinna (65°12'N., 11°00'E.), a small group of isolated islands, lies 26.75 miles NNE of Nordoyan.

Sklinna Light is shown from a tower, 14m in height, standing on Heimoya, the principal island of the group. Several rocky patches, which sometimes break, lie N of the W shoals off Vikna.

Galttaren (65°09'N., 10°41'E.) has a least charted depth of 11m and lies 8 miles WSW of Sklinna. Breigrund, 2.75 miles S of Galttaren, has a charted depth of 14.6m. A shoal, with a depth of 2.7m, lies 2.75 miles NNE of Galttaren.

Hogbraken (65°24'N., 11°02'E.), an isolated islet located 11.5 miles N of Sklinna, is visible for a distance of about 4 miles. Two above water rocks lie about 2.5 miles S of the islet; in moderate weather these two rocks are marked by heavy breakers. Shoals, which always break, extend about 1 mile W of these two rocks.

Steinan (65°36'N., 11°17'E.), a group of islets and rocks, lies 14 miles NNE of Hogbraken. They lie at the SW end of a larger group of islets known as Bremsteinan, which lies 9 miles W of Vega.

Skjaervaergrunna, located 9 miles N of Bremsteinan, has depths of 16.4 to 18.3m and is rocky; this area should be avoided in heavy weather, when the flow in the vicinity is strong and the sea troublesome. Nordvaer, Skjaevaer, and Hysvaer are three groups of islets which lie 4.5 miles NE, 4 miles E, and 7.5 miles ESE, respectively, from Skjaervaergrunna; these areas are foul and should be avoided.

The area 14 miles NE of Nordvaer is a mass of islets and reefs which are unapproachable from seaward.

Yttrholmen (Ytterholmen) (66°01'N., 11°42'E.), 13 miles NNE of Nordvaer, lies about 15 miles W of the SW point of Donna; the island is marked by a light. Skalsveskolten, Skalsveet, and Baksveet, covered by depths of 24 to 29m, lie 4.5 to 6.25 miles W and WSW of Yttrholmen (Ytterholmen) and are the farthest patches W in the approach to Yttrholmen.

The sea breaks over these rocky patches in bad weather.

Meloy (66°04'N., 11°37'E.), a rock, awash, with surrounding shoals, lies about 2 miles NW of Ytterholmen. In bad weather, these dangers form a large breaker which extends in a NE to SW direction.

Caution.—From the vicinity of Hogbraken to Ytterholmen, a wide berth should be given to the 183m contour; this is little

more than 1 mile seaward of the outer line of islets and shoals in some places.

Vikna to Donna

7.24 Vikna (64°55'N., 11°00'E.) consists of three large islands, Indre Vikna, Mellem Vikna, and Ytre Vikna. These are surrounded by a number of islets, rocks, and shoals.

Among the several shoal areas S and W of Vikna, the tidal currents set towards the land.

In the vicinity of Vikna, mariners bound for Indreleia or the inner fjords are strongly advised to enter through Folla or Maholmråsa.

Maholmråsa (65°00'N., 10°55'E.) is a good and deep channel leading ESE, from seaward, between the coastal reefs off the NW side of Vikna, then S of the islets **Maholmen** (65°00'N., 10°58'E.), Rauoya, and Kvaløya, lying off the N side of Vikna. Indreleia can be reached through Humulråsa or Risvaerfjorden.

Maholmråsa is approached from W by passing N of the Arsgrunnane patches, which lie 2 miles NW of **Arsflesa** (65°01'N., 10°41'E.); these shoal patches, with a least charted depth of 12.8m, break in bad weather.

The range lights on Maholmen, in line bearing 105°, ahead, lead 0.15 mile N of Djupbaen, awash, lying 0.75 miles ENE of Arsflesa, then S of Brosjetarene, patches with a depth of 10m, lying 0.5 mile farther ENE.

Oksrevltaren (65°01'N., 10°51'E.), a 16.5m patch, which breaks in heavy weather, lies close N of the range line, 2.5 miles WNW of the front range light.

It is advisable to keep the rear light open of the front range light in order to pass safely S of Oksrevltaren and the 1 and 2m patches which lie close N of the track, 1.5 miles ESE of Oksrevltaren.

The fairway of Maholmråsa S and E of Maholmen is flanked by numerous dangers, which are charted. The white sector of **Ternholmen Light** (65°00'N., 11°07'E.), standing on an islet off the S side of Kvaløya, leads clear of the dangers; however, Maholmtaren, a 1m patch, situated 0.5 mile WSW of the rear range light, lies within these bearings.

In the E approach to Maholmråsa, a drying reef lies 0.7 mile E of Ternholmen Light. A 10m patch lies 1 mile ESE of the light, and Ytre Ragnildtaren, a 3m patch, lies about 2 miles ESE of the same light.

Mefjordsbaen, with a least charted depth of 3.9m, lies 1 mile SE of Ternholmen Light.

The white sector of Ternholmen Light bearing leads clear of the above danger.

The range lights on Gjerdingen bearing 147° leads SE toward Indreleia; it may be reached alternatively, by continuing E and entering Risvaerfjorden.

7.25 Helmoya (65°12'N., 11°00'E.), 35m high, is the largest and highest of the Sklinna group; it is marked by Sklinna Light. A vessel proceeding to Indreleia may pass either N or S of the group, but only the N approach will be described.

From positions NW of Sklinna, the approach to a position about 4 miles W of **Sklinna Light** (65°12'N., 11°00'E.) is clear of dangers in the fairway. With the light bearing not less than 087°, a vessel will pass N of Horsgrunnskoltane, which has a

least depth of 6.7m, and Horsgrunnen, with a least depth of 2.7m, situated about 5 miles WSW of the light; these patches sometimes break.

The light on **Sklinnaflesan** (65°08'N., 10°59'E.), 4.5 miles S of Helmoya, bearing between 125.5° and 142°, leads NE of Horsgrunnskoltane, and SW of Sawgrunnen, an 11.9m patch lying 2.25 miles NNW of the light.

From a position 4 miles W of Sklinna Light, the route leads ESE, passing N of **Sawgrunnen** (65°09'N., 10°56'E.) and S of Breidgrunnen, a 2.7m patch which breaks, 1.25 miles SSW of the light. Flotran, 0.5 mile SSE of Breidgrunnen, a patch with a depth of 8.5m, is passed on its S side.

Stortaren (65°08'N., 11°01'E.), a rocky patch with a least depth of 4.8m, lies 1 mile NE of Sklinnaflesan. Lilletaren, a patch with a depth of about 10m, lies 1.25 miles ESE of Stortaren. Both of these patches are passed on the N side.

From a position in **Storgunden** (65°09'N., 11°07'E.), 3.25 miles ENE of Sklinnaflesan, the range lights on Gjerdingen bear 147°, 15 miles distant; however, they will not be visible. This alignment leads toward Humulråsa passing about 2 miles SW of **Mefjordbaen** (65°08'N., 11°12'E.), which breaks and is reported to always be visible.

The track continues SE, passing NE of Gjvutaren, a rocky patch with a least charted depth of 4.9m, lying 3.25 miles SSW of Mefjordbaen. The track also passes NE of Sporsluene, a 4.9m patch lying 1 mile SE of Gjvutaren; an isolated 8.5m patch lies 0.5 mile NE of Sporsluene.

Brunflesan Light (65°03'N., 11°17'E.), which stands among drying patches about 2 miles ESE of Sporsluene, is passed to the SW, then SW of Vevlan 2.75 miles SSE of Brunflesan Light. It is advisable to keep on the SW side of the range light in the vicinity of Vevlan which lies almost on the line; a 7m patch lies 0.2 mile SE of Vevlan.

When the vessel is clear of Vevlan, the front range light on Gjerdingen, bearing between 143° and 200°, leads NE of **Djuptarskjeret** (64°58'N., 11°22'E.), a 7m patch marked by a beacon, situated 3.25 miles SE of Vevlan. From Djuptarskjeret, proceed to pass W of Lamholmen and then S as previously directed into Humulråsa.

7.26 From the vicinity of **Vevlan** (65°01'N., 11°19'E.), the route passes W of Vevlan, then W and S of a 7m patch lying 0.3 mile SSE.

When the N tangent of **Store Kvitholme** (65°01'N., 11°36'E.), 7 miles E of Vevlan, bears 080°, steer on that course, until clear of Skjeribaen, 3 miles E of Vevlan.

When the vessel is S of Skjeribaen, about 0.5 mile distant, a mid-channel route ENE passing about 0.4 mile N of Store Kvitholme and the same distance S of **Madsoygalten** (65°02'N., 11°41'E.), 2.5 miles NE of Store Kvitholme, leads into the S entrance of Lekafjorden and joins Indreleia.

A 2.4m patch lies 0.5 mile WSW of Madsoygalten.

From the vicinity of **Mefjordbaen** (65°08'N., 11°12'E.), 7 miles SE of Sklinna, a branch of the entrance channel leads NE through Hortafjorden, passing about 3 miles NW of Leka to join Indreleia in Melsteinfjorden by one of two alternative routes.

From a position clear S and E of Mefjordbaen, **Hortafjorden** (65°10'N., 11°30'E.) may be entered on an E course.

The alignment of Sorflesa, the S islet of Steinsflesan, and the summit of **Gutvikfjellet** (65°08'N., 11°56'E.), 11 miles farther E, bearing 091.5°, leads toward a position about 2 miles W of Sorflesa. Storslua, a large shoal area with a least charted depth of 3.3m, lies 0.4 mile N of this track about 4 miles W of Sorflesa.

From a position about 2 miles W of Sorflesa, a mid-channel route will lead into Hortafjorden, passing N of **Steinsflesa** (65°09'N., 11°31'E.) and SE of Breigrunnen, a shoal patch 2.25 miles WNW.

When N of Steinsflesa, a vessel may steer E and enter the white sector of the light on that island. This sector, astern, will lead into the white sector of **Helgelandsflesa Light** (65°13'N., 11°53'E.).

The S of two alternative routes into Melsteinfjorden leads ENE, E, and NE from the vicinity of Steinsflesa, passing N of the dangers lying off Leka.

When N of Steinsflesa, the S end of **Melsteinen** (65°11'N., 11°51'E.), in range 078° with the N extremity of a headland 10 miles farther E, leads 183m N of Kriskjaertaren, 3.75 miles ENE of Steinsflesa, and 0.25 mile N of Storgrunnen, 2 miles farther ENE.

Melsteinfjorden may be entered by passing either W or E of Melsteinen. Care is necessary to avoid shoal water extending 0.2 mile SSW of Melsteinen, and **Lilletaren** (65°10'N., 11°50'E.), 0.5 mile farther SSW.

The white sector of the light on Helgelandsflesa leads into Melsteinfjorden passing between Steinstaren on the W and Melsteinen on the E.

Lekafjorden may be entered from N by rounding the dangers NE of Leka and passing SW of **Stortaren** (65°09'N., 11°50'E.), 2 miles S of Melsteinen, and then SSW into the fairway of the fjord.

7.27 Ytterholmen (66°01'N., 11°42'E.) may be approached from the SW, avoiding Baksveet, Skalsveskolten, and Skalsveet, which lie 6 miles WSW, 6 miles W and 5.5 miles W, respectively, from that islet. The sea breaks over these shoals in heavy weather.

From a position SW of Ytterholmen, the SW summit of **Store Steinen** (66°00'N., 12°01'E.) is the only part of the Steinar group that can be seen. Vessels approaching Husvaetfjorden should keep this summit bearing between 072° and 080°, which will lead S of Langskolten and Storgrunnsvet, 1.5 miles S and 1.75 miles SSE, respectively, from Ytterholmen, and N of Kastsveet, which is reported to break in heavy weather, 3.5 miles S of Ytterholmen.

Langfallet, a 2m rocky patch, lies about 2 miles, ESE of Ytterholmen, on the N side of the fairway.

The white sector of the light on Store Steinen leads over the same area described above.

From a position about 2 miles WSW of Store Steinen, the white sector of the auxiliary light on Ytterholmen, astern, leads S of all dangers in Steinar and N of **Kvanflessveet** (65°58'N., 12°03'E.), an 11m patch 9 miles ESE of the light.

Husvaerfjorden (65°58'N., 12°05'E.) extends SE from the vicinity of Steinar to Husvaersundet, which is entered between **Traetholmen** (65°56'N., 12°12'E.), and Dragan, an islet 0.2 mile WSW. From a position about 2 miles SE, the white sector of the light on Store Steinen, bearing between 308° and 326°,

astern, leads toward Traetholmen, passing SW of **Langodbaen** (65°58'N., 12°07'E.), which lies 1.75 miles ENE of Kvanflessveet. Indre Flesa, an extensive area of foul ground, lies S of Kvanflessveet.

Langobaen, 1.25 miles N of Traetholmen, should be passed on its SW side; then steer toward the light on Traetholmen passing SW of Stappen, which is marked by a beacon. A 6.4m patch lies 183m S of Stappen.

Husvaersundet (65°56'N., 12°12'E.) lies in a N-S direction; the white sector of the light on Traetholmen, astern, leads through the fairway for a distance of 1 mile.

Seisholmtaren, a 1.5m patch, lies on the E side of the fairway, 1 mile S of Traetholmen.

Altfjorden (65°56'N., 12°19'E.) is entered from the S end of Husvaersundet; the fairway passes S of Seisholmtaren and NW of **Springen Light** (65°55'N., 12°13'E.). Buoy Light, 2.75 miles ENE of Springen Light, bearing 069°, passes between Seisholmtaren and Springen Light.

From Springen, the white sector of Springen Light leads into the fairway, passing clear of the islets on each side.

Indreleia continues NNE through Alstfjorden to Ulvanger.

Risvaerfjorden to Ulvanger

7.28 Indreleia continues N from Risvaerfjorden to Ulvanger, about 70 miles distant. At position 65°08'N., 11°51'E, there is a choice of three different routes. The W route through Vegafjorden is the preferred route.

Dolmsundet (65°00'N., 11°37'E.) leads ENE from Risvaerfjorden, passing between Dolma and the mainland SE, and forms the principal channel of Indreleia.

The white sector of the light close NNE of Eiternestangen, bearing between 199° and 203°, astern, leads toward Dolmsundet, leading E of Hornbaen, then E of an 11.9m patch, 0.35 mile NE of Hornbaen, and E of Abregtaren, 0.4 mile farther NE.

From a position E of Abregtaren, **Dolmsund Light** (65°00'N., 11°39'E.) ahead, leads clear of danger into Dolmsundet. This sector also leads from seaward passing N of Hornbaen and the 11.9m patch NE of it; however, Abregtaren lies within the light sector. With Dolmsund Light astern, this leads clear N of Tenfjordsluen, a 5.8m patch, lying 0.8 mile NE of the light. The 245.5° line of bearing should be favored.

Madsoygalten Light (65°03'N., 11°41'E.) ahead, leads into the center of the fairway of Lekafjorden.

Indreleia leads from the NE end of Dolmsundet through Lekafjorden, between Madsoya and Leka on the NW and Austrå on the SE. Lekafjorden is joined at its SW end by one of the channels leading inwards from Sklinna.

Lekafjorden (65°05'N., 11°47'E.) may be entered from a mid-channel position SE of Magsoygalten Light, with the white sector of **Sore Gutvik Light** (65°05'N., 11°49'E.) ahead. When E of Magsoygalten Light, steer a mid-channel course to clear off-lying dangers on either side.

From the N end of Lekafjorden, the track of Indreleia passes between Melsteinen and Sorflesene, a group of partly submerged rocks about 0.4 mile E of the island, then between **Helgelandsflesa** (65°13'N., 11°54'E.), 2 miles NNE of Melsteinen, and Uertaren, a reef which dries, 0.7 mile SSE of

Helgelandsflesa. Several shoals lie between Sorflesene and Uertaren on the E side of the fairway.

Vessels in the vicinity of Melsteinen may expect a SW tidal current out of Royningen, except during strong W winds, when a weak tidal current may set to the E.

Vessels approaching Melsteinenfjorden from the S should pass E of Lilletaren, 0.75 mile SSW of Melsteinen. The white sector of the light on Helgelandsflesa leads E of Lilletaren and then between **Melsteinen** (65°11'N., 11°51'E.) and the shoals to the E and NE of the island.

With the light on Melsteinen, astern, and showing green, this leads through the fairway between Helgelandsflesa and the NW side of Uertaren.

Langsundet (65°14'N., 11°58'E.) is formed between Langoya on the W, and Kvaloya on the E, and lies 2.25 miles NE of Melsteinen.

Good anchorage may be taken in Langsundet, in 10 to 17m, sand and clay, abreast the summit of Langoya.

7.29 After passing SE of Helgelandsflesa in Melsteinenfjorden, Indreleia continues NNE on the W sides of the islands of Langoya and Kvaloya.

Lyngvaer (65°16'N., 11°58'E.) is a group of islets and rocks extending about 3 miles N from Kvaloya. Tyven, lying about 1 mile NW of Kvaloya, and Vagoytaren, a 7m patch a little over 1 mile NNE of Tyven, are the farthest W of the dangers off Lyngvaer.

Gronstabben (65°16'N., 11°56'E.), a reef, lies on the W side of the fairway, 0.85 mile NW of Vagoytaren.

From Gronstabben, Indreleia passes between Gloven, 3.5 miles NE of Gronstabben, on the E side of the fairway, and Biskoptaren, a 1.8m patch on the W side of the fairway, 0.9 mile NW of Gloven.

Helbergotaren (65°20'N., 12°03'E.) lies on the E side of the fairway, 1.25 miles NNE of the light on Gloven; it has a least depth of 1.8m.

Helbergoya, marked by a light, lies on the W side of the fairway, 0.7 mile NNE of Biskoptaren; foul ground extends 0.1 mile SSW and 0.8 mile NNE from the island. The many shoal patches in this area may be seen on the chart.

Torgfjorden extends NE from the vicinity of **Sandvaerodtaren** (65°22'N., 12°03'E.), situated at the extremity of the foul ground NNE of Helbergoya.

Vessels proceeding N pass E of Helgelandsflesa; then a mid-channel course NNE will pass about 0.2 mile E of the light on Gronstabben. When abreast of Gronstabben, steer in the white sector of the light on Helbergoya, which leads in the fairway passing W of Gloven and E of Biskoptaren.

When SE of Biskoptaren, steer a mid-channel course to pass about 0.2 mile E of Helbergoya and the same distance E of Sandvaerodtaren, and then into the SW entrance of Torgfjorden.

7.30 Lyngvaerfjorden (65°15'N., 12°05'E.) is enclosed by Kvaloya and Lyngvaer, on the W, and the mainland, on the E.

Vessels entering Lyngvaerfjorden should proceed to a position about 1 mile NNE from the entrance, then steer E passing N of Lyngvaertaren, at the N end of Lyngvaer.

When in the white sector of **Lyngvaergalten Light** (65°16'N., 12°03'E.) steer a course mid-channel to pass 0.5 mile NE of the light.

The white sector of Lyngvaergalten Light, astern, will lead into Vikvagen, where anchorage may be taken, in 19m, hard sand.

Vikvagen (65°18'N., 12°07'E.) is encumbered with shoal patches and small islets; the approach to the anchorage passes close SE of a 1m patch and a 7m patch lies close off the S side of the fairway. These and other dangers may be seen on the chart.

Somnesvagen (65°23'N., 12°10'E.) is entered off the SE side of Torgfjorden, 2.25 miles from its S entrance. Somnesvagen is approached between Somnesoya, an islet, on the S side, and the S extremity of Sylskjaerene, 0.75 mile N.

Anchorage may be taken SE of Jarholme, an islet 0.75 mile within the entrance to Somnesvagen, in 18.3m, sand and clay.

Berg (65°22'N., 12°12'E.) ([World Port Index No. 23020](#)) close NE of Jarholme, has two quays. One quay is 62m long, with depths of 9.3 to 12m alongside; the other quay is 55m long, with depths of 7.6 to 10.8m alongside.

7.31 Bronnoysundet (65°27'N., 12°10'E.), on which the port of Bronnoysund is situated, is entered between **Ormoaya** (65°26'N., 12°09'E.), situated on the W side of Torgfjorden 5 miles NE of its S entrance, and Stokholmen close E; it leads 3 miles NNE into Tilremfjorden.



Courtesy of Kystriksyeien Reiseliv AS
Bronnoysund

The passage through Bronnoysundet is narrow and local knowledge is required; however, it is well-marked.

Tidal currents in Bronnoysundet are strong, making navigation difficult.

This channel can only be used by vessels drawing up to 5.2m, with a maximum beam of 12.2m.

Bronnoysund (65°28'N., 12°12'E.) ([World Port Index No. 22990](#)) is a coastal natural harbor situated on the E side of

Bronnoysundet, 2 miles NNE of Ormoya. The harbor area covers most of Bronnoysundet.

Bronnoysund may be approached from N or S. The least depth in the S approach from Torgfjorden is 6m and in the N exit to Tilremfjorden the least depth is 6.5m. A bridge with a vertical clearance of 30m spans the fairway in a position about 0.4 mile SW of the church in Bronnoysund.

Tides rise about 2.7m at springs and 2.1m at neaps.

There is about 630m of total quayage. Berths vary from 14 to 102m in length with depths of 1.5 to 10m alongside. Vessels up to 5,000 tons can be accommodated.

It is reported that a deep-water quay 100m long with a depth of 20m alongside, was under construction about 1.5 miles NNE of Bronnoysund Church.

Pilotage.—A pilot can be obtained through the Harbor Office. Within the harbor area power-driven vessels are required to proceed at no greater speed than good seamanship and maneuverability demand to avoid creating a damaging wash.

Anchorage.—Anchorage may be taken, in 12 to 16m, 1.25 miles SSW of the church in Bronnoysund, and in depths of 20 to 24m, sand, 1.5 miles NNE of the church.

Anchorage is prohibited close N of the quays to permit maneuvering for vessels berthing and unberthing at the packet-boat quays.

7.32 The W route of Indreleia leads from the S entrance of Torgfjorden, WNW, N of **Sandvaer** (65°21'N., 11°58'E.), and Klubholmen Light, then NNW passing close E of Blabakflua Light, then the track passes S and W of Uttorgvaer, an island group 6 miles NNW of Helbergoya.

From the S entrance to Torgfjorden, vessels proceed WNW on a mid-channel course which will lead S of **Sandoytaren** (65°23'N., 12°00'E.), a reef with a charted depth of 4.9m, situated about 1 mile ENE of Klubholmen Light.

From E of Klubholmen Light, a vessel should alter course to pass E of **Hokstaren** (65°24'N., 11°58'E.), a 2.4m patch, 1.5 miles N of the light.

On the E side of the fairway, 0.35 mile E of Hokstaren, lies a 14.9m patch; a 5.5m patch lies 0.25 mile farther NE.

Fleina, marked by a light, is situated 0.75 mile NE of Hokstaren. Blabakflua Light lies 0.6 mile WNW of Fleina; the fairway passes between these two lights.

After passing between Fleina and Blabakflua, Indreleia leads NNW to pass between **Knutstaren** (65°26'N., 11°55'E.), a 1.8m patch 2 miles NW of Blabakflua, on the W side, and Flestaren, a 4.9m patch, 0.55 mile E, on the E side. The white sector of Blabakflua Light, astern, leads between these two dangers. Tvertaren, a 7m shoal patch, lies on the SW side of the fairway 0.5 mile NW of Blabakflua Light.

When the vessel is clear of Knutstaren, a NNE course may be set, passing about 0.5 mile WNW of **Uttorgflessa Light** (65°26'N., 11°57'E.) and W of the Uttorgvaer group.

This part of Indreleia crosses the E end of Vegafjorden in a SSW to NNE direction.

7.33 After passing into Vegafjorden, vessels should steer for the W edge of the 67m summit of Ylvingen, which lies 10.5 miles NNE of Uttorgflessa Light.

Halholmen Light (65°32'N., 12°05'E.) is located on the SE side of Indreleia, about 7 miles NNE of Uttorgflessa Light; Klubben Light is situated 2.75 miles NW of Halholmen Light.

The white sector of Ylvingen Light, about 4 miles NNE of Halholmen Light, leads through the fairway of Vegafjorden, passing between the dangers in the vicinity of Halholmen Light and the dangers off the SE side of Vega.

From Halholmen Light, vessels should alter course NE and pass S of **Ylvingen** (65°36'N., 12°10'E.) and N of the shoals lying about 0.5 to 1 mile N and NNE of the light.

Indreleia leads about 7 miles N through Tilremfjorden from Bronnoysundet to a junction between **Hornsneset** (65°35'N., 12°18'E.) and Ylvingen, 3.5 miles WNW, with the W route of Indreleia through Vegafjorden.

Nordtaren (65°34'N., 12°11'E.), a 1.8m shoal patch, lies on the W side of Tilremfjorden, 3.25 miles SW of Hornsneset.

Anchorage, in 14m, sand and clay, may be taken in a cove, near Tilrem, 3.5 miles NNE of Bronnoysund Church.

7.34 Velfjorden (65°35'N., 12°21'E.) is entered N of Hornsneset, the W entrance point. The fjord penetrates the coast about 11 miles SE to **Nevernes Light** (65°26'N., 12°35'E.); from the light, Langfjorden continues about 6 miles farther in the same direction. Okkfjorden, Storfjorden, Litle Borja, and Stor Borja, all opening off the E side of Velfjorden, are deep and clear, but are unmarked.

Sorfjorden and Heggefjorden, branching off the S side of the fjord and the extension of Langfjorden, are neither so deep nor so free from dangers as the fjords on the E side; the land in their vicinity is less mountainous.

Hornstaren (65°35'N., 12°19'E.), a shoal patch with a charted depth of 1.8m, lies in the entrance of Velfjorden, 0.4 mile ENE of Hornsneset. Jenssluin, an 8.8m patch, lies 0.25 mile farther NE.

Manddauen Light situated on a reef, 0.75 miles SE of Hornsneset.

The entrance to Storfjorden is encumbered with dangers, whose positions may best be seen on the chart.

Ice.—Sorfjorden, Heggefjorden, Stor Borja, and most of Storfjorden are usually frozen over in winter. Ice forms first and lasts longest in Langfjorden. Obstruction by ice is greatest after the New Year.

Tides—Currents.—The tidal currents usually set into Velfjorden with the rising tide and out with the falling tide. Currents usually set out of the branch fjords but they are affected by the tide and wind.

From the entrance N of Hornsneset, the W extremity of **Bjornholmen** (65°37'N., 12°18'E.) in range 329°, astern, with the E extremity of Kvitjerta, an islet 1 mile NNW of Bjornholmen, leads NE of Jenssluin, awash, and the shoal patches E.

A white sector of Manddauen Light, astern, leads through the fairway of Velfjorden to within about 2 miles of Nevernes Light; a white sector of that light ahead, leads through the fairway from abreast Okkfjorden to within a short distance of the light.

All the branch fjords of Velfjorden afford suitable depths for anchorage during the ice-free season.

7.35 Vevelstadsundet is entered about 3.5 miles NNE of Hornsneset and lies between the mainland and the E side of

Hamnoya. A 5.5m rocky shoal lies about 2 miles within the entrance. This danger lies within the white sector of **Snertholmen Light** (65°43'N., 12°28'E.).

Forvik, located on the mainland about 0.5 mile S of Snertholmen Light, has a timber quay, 36m long, with depths of 4.2 to 6.5m alongside.

Between the S end of **Ylvingen** (65°36'N., 12°10'E.) and Ulvanger, about 30 miles NNE, Indreleia is comparatively free from dangers.

Tides—Currents.—In this section of Indreleia, the tidal current sets N from about half rising tide to half falling tide; the period of the S current is the reverse of this. Their strength is variable and may be affected by the prevailing wind. The tidal currents set out of the adjacent fjords, and when the direction of the set coincides with that of the main tidal current the latter may run with great strength, particularly in the narrow channels.

In position 65°36' N, 12°13' E, off the SE side of Ylvingen, the W and E routes of Indreleia unite and continue 7.5 miles N to **Skjelva** (65°43'N., 12°19'E.), then 23 miles NNE through Tjottafjorden and Alstfjorden to Ulvanger.

7.36 Tjottafjorden consists of the waters around the junction of Indreleia and the entrance to Vefsnfjorden off the SW side of the island Tjotta. Mindvaeret, the foul ground NE of Skjelva, and Mindlandet, the 159m high island 2 miles NE of Skjelva, form the SE side of Tjottafjorden.

Breigtaeren (65°45'N., 12°21'E.), awash, lies 2.25 miles NNE of Skjelva and Nordtaren, with a charted depth of 0.9m, lies 0.3 mile farther NNE; these dangers lie off the NW side of Mindvaeret.

Foul ground extends 1.25 miles into Tjottafjorden from the S extremity of Tjotta.

Tjotta (65°50'N., 12°26'E.) ([World Port Index No. 22940](#)), a small port, is located on the S side of the island Tjotta. Local knowledge is required to enter the harbor, which has depths of 3.6 to 5.1m alongside the steamer quay.

Tjotta Church, with a square tower and a dark gray roof, is prominent.

Erviken (65°48'N., 12°28'E.), situated on the NW side of Mindlandet, 2.25 miles SSE of Tjotta Church, has a quay, 26m long, with alongside depths of 8.3 to 13m.

Vefsnfjorden is entered from Indreleia through Tjottafjorden, between **Langholmen** (65°49'N., 12°27'E.), off the SE coast of Tjotta, and the NW coast of Mindlandet, 1 mile SE. The W arm of the fjord extends 14 miles NE, between the mainland and Alsten; the SE arm of the fjord extends 12 miles SE to the port of Mosjoen.

The outer part of the fjord is sparsely vegetated and the landscape is dominated by De Syv Sostre, in the SE part of Alsten. The inner part of the fjord is wooded and most of the villages are situated there.

Tides—Currents.—The tidal currents run into Vefsnfjorden with the rising tide and out of the fjord with the falling tide. At the entrance, when the ebb coincides in direction with the current in the channel off the entrance, the resultant flow may have considerable strength.

The fairway of Vefsnfjorden is free of dangers other than those shown on the chart. The head of the fjord is shallow for a distance of 0.75 miles N of Mosjoen.

The fairway of Vefsnfjorden is about 0.4 mile wide between **Sornes** (65°58'N., 12°52'E.), on the W side, and Nubben, on the E side, about 11 miles NW of Mosjoen.

Anchorage may be taken, in 17 to 20m, in the cove on the W side of Sornes; it shelves quickly to the N.

Mosjoen (65°51'N., 13°11'E.)

[World Port Index No. 22920](#)

7.37 Mosjoen is a small natural harbor situated at the head of Vefsnfjorden, about 26 miles from Indreleia. It consists of the quays and the city of Mosjoen, which is situated 0.75 mile S of the quays.

Winds—Weather.—Mosjoen is well sheltered and port cargo handling is seldom interrupted. The port is usually ice-free, except for some shallow bays which may freeze over in severe winters; shipping is rarely hampered by ice.

Tides—Currents.—Mean High Water Spring tides in Mosjoen are 2.7m and MLWS is 0.4m; the greatest spring range observed was 4m.

Depths—Limitations.—The channel leading to the port is narrow.

The aluminum quay is 271m long, with a depth of 11m alongside. Other quays range in length from 45 to 325m, with depths 3 to 9.5m alongside.

Vessels over 10.1m draft are berthed only at HW.

It was reported that a 55,000 dwt vessel, with a length of 212m and a draft of 11m, was accommodated in the port.

Pilotage.—Pilots are available at Asvaer. For vessels leaving Mosjoen, pilots may be obtained from Sandnessjoen.

Anchorage.—Large vessels may anchor off Halsøy, 0.9 mile N of Mosjoen, in 30m, sand and clay, and off the aluminum works, in 40m, sand and clay.

7.38 The track of Indreleia, N of Tjottafjorden, leads between Søndre Rosøya and Norde Rosøya, on the W side, and Tjotta, on the E side.

Juledagene Light (65°51'N., 12°23'E.) is situated near the edge of the foul ground extending W from Tjotta, about 8 miles N of Skjelva. A patch, with a depth of 8.5m, lies on the W side of the fairway, 0.45 mile W of Juledagene Light.

Rosøytaren (65°52'N., 12°22'E.), with a charted depth of 5.8m, lies 0.25 mile off the NE extremity of Nordre Rosøya; it may be passed on either side.

Hamnesleira, a large open anchorage, is entered between Faksholmen, off the NW part of Tjotta and **Haugneset** (65°53'N., 12°24'E.), 1.25 miles N. Large vessels anchor, in 25 to 30m, sand and shells, 0.75 mile ENE of Haugneset; a rock is charted about 0.3 mile ENE of the anchorage.

From the vicinity of Rosøytaren, Indreleia continues NNW, passing between the SW end of Alsten and **Skarvøya** (65°53'N., 12°20'E.), which lies 1.5 miles NW of Haugneset.

A rock, awash, lies on the foul ground extending NNE from Valøya, about 1 mile WNW of Haugneset.

When E of Skarvøya, the fairway continues N about 1 mile, and passes between **Karholmen** (65°55'N., 12°23'E.) on the E side, and an 11m patch 0.4 mile W. Then a mid-channel course leads NNE passing E of Søndre Sorøyholme, 0.45 mile NNW of Karholmen.

The NE extremity of Alteren is situated on the W side of Indreleia, 0.85 mile N of Sondre Soroyholme; **Valloygalten** (65°57'N., 12°24'E.), with a least depth of 4.9m, lies 0.8 mile NNE of Alteren.

7.39 Alstfjorden extends from the vicinity of **Sondre Soroyholme** (65°55'N., 12°22'E.) along the NW side of Alsten, to the vicinity of Sandnessjoen 9 miles NE, where it leads into Ulvangen.

A channel from seaward entered off Ytreholmen joins Alstfjorden, at its SW end, from Alterfjorden.

Vikholmen (65°57'N., 12°26'E.), a small islet, lies on the E side of the fairway through Alstfjorden, 1.5 miles ENE of Alteren. Foul ground extends 0.7 mile NNE from the islet.

Valloya and Svinoya lie in a NNE direction from 0.3 to 0.7 mile, respectively, NNE of Valloygalten; Svartskaer lies 0.15 mile off the NE extremity of Svinoya.

From abreast Sondre Soroyholme, vessels can steer for the summit of **Skorpa** (66°02'N., 12°33'E.), which rises about 8 miles NNE. This course leads through the fairway of Indreleia into Alstfjorden. When well into the fjord, a mid-channel course will lead NE to the S entrance of Ulvangen.

Sandnessjoen (66°01'N., 12°38'E.) ([World Port Index No. 22750](#)), protected from the S by a road embankment and by the island of Holmen, lies on the NW side of Alsten, at the junction of Alstfjorden and Ulvangen. The entrance to the harbor is from the E.

During strong W winds, an unpleasant short sea is raised off Sandnessjoen; at times strong squalls come down from the mountains situated about 5 miles S.

The harbor authority operates a total quayside of about 780m. The berths vary in length from 18 to 148m, with depths of 2.6 to 10.5m alongside. Some of the berths and installations are situated in Sandnesvagen, on the SE side of town, and in Botnfjorden, 1.5 miles SE; these are accessible from Leirfjorden.

Pilotage.—Sea pilots are available on 24 hours. Vessels should send a request 2 hours in advance through Lodingen. For northbound vessels, pilots board about 2 miles WNW of Andersbakken. By agreement, pilots will board in position 66°15.3'N, 12°36.7'E, and are available for vessels proceeding N or S.

Local knowledge is required for vessels to take up berthing space, as the tidal currents are strong.

Anchorage is available, in 16.5 to 24m, 0.15 mile W of the S end of Holmen.

Donna to Bodo

7.40 The high peaks of the mainland and larger islands often rise to several thousand feet and at times are visible over 50 miles.

Sanna (66°30'N., 12°03'E.), the principal island of Traena, lies 30 miles NNE of Ytterholmen; it is by far the most important landmark on this coast. Its principal peak, Traenstaven, rises to about 331m, and may be seen at a distance of more than 40 miles; it is unmistakable.

Kunna, a headland on the mainland 44 miles NE of Sanna, can be made out when in the vicinity of Traena.

Three high peaks rise on the island of Tomma, about 21 miles SE of Sanna. The peak farthest N rises to a height of 916m and resembles Traenstaven.

Lovunden (66°22'N., 12°20'E.), 619m high, lies about 10 miles SE of Sanna. The island appears isolated but is easily identified by its nearly perpendicular W side and the gradual slope on its E side.



Luroy

Luroy, an island lying about 11 miles ENE of Lovunden, is 689m high. It is more rounded and has less abrupt declivities than other islands in the vicinity. Hestmannoy lies with its S end about 4 miles N of Luroy and has a pointed peak 568m high.

Telneistind, on the mainland, rises to a height of 967m, 0.75 mile inland, in a position 8.75 miles ENE of Hestmannoy.

Between Hestmannoy and Kunna, about 28 miles NNE, the coast line is rather indistinct, but Kunna, which appears as an island, is easily identified.

Fugloya (67°04'N., 13°50'E.), an island about 8 miles NE of Kunna, is steep and rises to a height of 765m. Sandhornet, a conspicuous mountain on the island of Sandhornoya, 5.5 miles NE of Fugloya, is 996m high; its W face is precipitous.

From this part of the coast, Svartisen, a range of glacier-bearing mountains, may be seen. It is one of the most remarkable features of this part of Norway. As there is no glacier so near the sea on any other part of the coast, it can be identified with certainty from a considerable distance seaward.

Svartisen stands out well from dark mountains in the background. In spring and cold summers, it appears white; in warm summer, when surface snow melts, it becomes bluish-green. In winter, when all mountains are covered with snow, Svartisen, seen from NW and N, appears to run parallel with the horizon, with hardly any depression between peaks; the highest part only shows some dark patches of bare rock among the snow.

Landegode (67°24'N., 14°20'E.), 803m high, lies 6 miles NNW of Bodo; in clear weather the S part of the Lofoten Islands will be visible about 55 miles to the WSW.

7.41 A bank, with a depth of 12.8m, was reported to lie about 110 miles W of Sanna. A depth of 14.6m, the position of which is doubtful, was reported about 85 miles WNW of Sanna. A depth of 10m was reported to lie about 0.2 mile NW of the 14.6m patch.



Courtesy of Kystriksyeien Reiseliv AS
Donna

The area for about 20 miles W of **Donna** (66°06'N., 12°33'E.) is foul. Ytterholmen lies about 15 miles W of the SW point of the island.

Lillesveet (66°06'N., 11°31'E.) and Skolton, rocky banks situated about 7 miles NW of Ytterholmen, have least depths of 27m and 26m, respectively. Between these banks and Ytterholmen, there are other shoals and banks which break.

Floholm (66°10'N., 11°42'E.) lies 4 miles NE of Skolton; Floholm is the middle islet of the group. Lunboen the farthest SW of the group, lies 1.5 miles NE of Skolton. It dries at very LW and the breakers are visible from the offing for a considerable distance. Foul ground extends about 2 miles NW from Floholm.

Moholmssve, an isolated bank with a depth of 29m, lies 5 miles NNE of Floholm and Samskallen, also an isolated bank with a depth of 33m, lies 9 miles farther NNE.

Myken (66°45'N., 12°25'E.), the group of islands next N of Traena, lies with its S end about 15 miles NE of Sanna. The water surrounding Myken is deep almost to its outermost islets. This can cause the sea to break over the islets with strength.

Tennholmen, marked at its SW end by a light, lies 17 miles NE of Myken. Below-water rocks extend about 1 mile W from the light and 5.75 miles NE. Sveboen, a rocky shoal with a charted depth of 4.8m, lies 5.75 miles WSW of the light; a rocky 5.8m shoal lies 2.5 miles S of Sveboen.

Gronna (67°01'N., 13°11'E.), a dangerous group of islets and rocks, lies 2.5 miles N of Tennholmen, and is the outermost danger WNW of **Kunna** (66°57'N., 13°31'E.). In stormy weather and with high tides, the sea breaks over the entire Gronna group.

Asvaer to Indreleia

7.42 Asvaer (66°14'N., 12°12'E.), an island group situated 19 miles NE of Ytterholmen, consists of a group of rocks and islets; some of them are of a moderate height.

Asvaer Light is shown from a prominent tower, 18m in height, standing near the NE extremity of the group. A racon is located at the light tower.

There are no dangers in the seaward approach to Asvaer, which leads between **Ovskallen** (66°25'N., 11°58'E.), an 11m

depth lying about 5 miles SSW of Sanna, and the Floholm group, about 13 miles farther SSW.

A principal channel leads in through Nordre Asvaerfjorden, off the N side of Asvaer; through Stifjorden, 12 miles ESE of Tomfjorden, then 11 miles E; to join Indreleia off the SE or NE side of Tomma.

The approach to Asvaer is not difficult in favorable weather.

Tides—Currents.—The tidal currents in Nordre Asvaerfjorden flow NE on the flood and SW on the ebb.

Pilotage.—A pilot station is situated on **Andersbakken** (66°16'N., 12°18'E.), the NE island of Asvaer. The pilots embark 2.5 miles WNW of the station.

The pilot radio calling frequency is VHF channel 16; the working frequencies are VHF channels 12 and 13.

Nordre Asvaerfjorden is not difficult to approach in daylight with clear weather. The peaks on Tomma are especially useful in making the entrance.

Breifind (66°15'N., 12°48'E.), 821m high, in the S part of Tomma, bearing about 098° leads in N of Asvaer.

After passing N of the light on Andersbakken, course should be altered to pass S of Syntholmbaen, a drying reef about 3.5 miles ESE of the light, and N of **Utoybaen** (66°14'N., 12°36'E.), about 4 miles ESE of Syntholmbaen. Utoybaen lies about 0.7 mile off the NE extremity of Donna.

Stifjorden, between the S side of Tomma and the N side of Lokta, is free from dangers, except for a small area of foul ground extending about 0.5 mile N from the NE end of Lokta; it joins Indreleia off the NE coast of Lokta.

Skifjorden, leading S from Stifjorden between the E side of Donna and the W side of Lokta, is part of the W route of Indreleia between Ulvanger and Gjeroya. The channel passes either side of **Svensskjeret** (66°06'N., 12°41'E.), an above-water rock lying 0.45 mile E of Donna. Dangers in the fairway may best be seen on the chart.

In Skifjorden, the tidal currents nearly always set N along the coast of Donna; northbound vessels should keep to the W side of the channel and southbound vessels should keep to the E side.

Ulvanger to Meloyfjorden

7.43 Between Ulvanger and Gjeroya, about 25 miles NNE of Donna, there are two channels of Indreleia. The W channel leads NW of Tomma through Tomfjorden. The E channel, passing E of Tomma, is the preferred route. It is less intricate and has a relatively wide fairway which is practically free from dangers.

From the N end of Ulvanger the fairway of Indreleia leads E of **Finnkona** (Finkonna) (66°07'N., 12°44'E.), Lokta and Tomma, passing W of Hugla and Handnesoy.

Rana, the approach to the port of Mo I Rana is entered from Indreleia, on the SE side of Lokta and NE of Finnkona. **Bruneset** (66°08'N., 12°50'E.), 2.25 miles ENE of Finnkona, is the S entrance point of Rana and Huglneset, 2.5 miles NNE of Bruneset, is the N entrance point.

Rana extends 24 miles ENE to Stromholmen where Nordana leads 11 miles farther ENE to Mo I Rana and the mouth of Ranelva.

Branch fjords include Utskarpen, Elsfjorden, and Sorfjorden.

Tides—Currents.—The tidal currents off Lokta are variable. In Rana, they usually set out with the falling tide and into the fjord with the rising tide. In the outer part of the fjord, the ebb current is strongest on the S side.

During thaws, accompanied by prevailing E winds, the set in the fjord may be continuously outward and the velocity may be 2 to 3 knots; in the vicinity of the head of the fjord there is usually a constant outward set.

7.44 Ranskjeret (66°09'N., 12°52'E.), an above-water rock, lies 1.5 miles NE of Bruneset in the entrance to Rana. From Ranskjeret, the fairway is free of dangers to Bardalsoya, a distance of about 13 miles.

Storgrunnen, a rocky 14m patch, lies 0.5 mile WSW of Bardalsoya. Mud flats extend S from Bardalsoya to the mainland.

At the head of the fjord, for about 1 mile SW of Mo I Rana, the coastal reef dries and extends up to 0.2 mile offshore in places.

An anchorage is charted on the SE side of Bardalsoya, in 25m. A 6m line is formed 183m S, W, and N of the anchorage.

Anchorage can be obtained in **Utskarpen** (66°15'N., 13°35'E.), 5 miles ENE of Bardalsoya, in 33m, clay, at the discretion of the pilot.

Nesna (66°12'N., 13°01'E.) is a small town with several light industries. Located at the end of a peninsula extending from the mainland, it is E of the island of Hugla and S of the island of Handnesoya. Nesna has a concrete jetty with a NNE-SSW orientation. It is 117m long and has depths of 6.5 to 8.1m alongside. At the head of the jetty, a berth, orientated ESE-WNW, also of concrete construction, is 66m long and has depths of 3.9 to 7.1m alongside. Both the jetty and berth protect a ferry and boat harbor on the N side of town.

Hemnesberget (66°13'N., 13°36'E.) ([World Port Index No. 22790](#)) is a small natural coastal port situated on the E entrance point of Elsfjorden, about 2 miles SSE of the entrance to Utskarpen. A mooring buoy is moored off the quays, which are up to 60m long and have depths from 3.9 to 14.5m alongside.



Mo I Rana

Mo I Rana (66°19'N., 14°08'E.)

[World Port Index No. 22760](#)

7.45 Mo I Rana, also known as Mo, is situated at the head of Nordrana, near the mouth of Ranelv, and is approached

through Rana. It consists of the city, with an inner harbor with berthing facilities for small vessels and an outer harbor that can accommodate large vessels alongside and at anchor.



Mo I Rana

Winds—Weather.—The port is well sheltered and normal operations are seldom interfered with by weather conditions. The harbor is ice free.

Tides—Currents.—The range of spring tides is 2.7m, a range of 3.6m was observed during 1951-53.

Depths—Limitations.—The Town Quay is 250m long, with depths of 5.5 to 8m alongside. The Jernverk Steel Quay is 250m, long with a depth of 8m alongside.

There are facilities for ro-ro and container vessels. Koksverk Coke Pier has quays, 130m long on the N side and 90m long on the S side, with depths of 11m alongside. Bleikvassli Gruber Pyrite Quay is 35m long, with a depth of 7m alongside.

A new iron ore quay can accommodate vessels up to 80,000 dwt, with a draft of 16m.

Pilotage.—Pilotage is compulsory. Vessels embark pilots about 2 miles WNW of Asvaer Light.

The pilot calling frequency is VHF channel 16; the pilot working frequencies are VHF channels 12 and 14.

Tugs are recommended for vessels of more than 10,000 dwt and are available with 24 hours notice.

Regulations.—Vessels operating within the seaplane harbor, N of the harbormaster's office, are required to maneuver with care and comply with the regulations governing the transit of seaplane operating areas. A patrol boat displaying a yellow and black flag patrols the seaplane harbor when seaplanes are operating.

Anchorage.—Anchorage in the harbor is to be advised by the harbor pilot.

Caution.—A dumping ground was established 0.7 mile NNE of Hauknesbukta Light.

7.46 Indreleia continues N of Rana passing W of **Hugneset** (66°10'N., 12°51'E.), the SW extremity of Hugla, an island which rises to a height of 623m, in its S part.

Mefjordsholman (66°12'N., 12°50'E.), consisting of two small islets fringed by reefs, lies on the W side of the fairway, off the SE end of Tomma, about 24 miles N of Hugneset.

Handnesholmen, an islet marked by a light, lies on the E side of the fairway about 2 miles NE of Mefjordsholman. Foul ground extends about 0.3 mile NNE from the islet.

A white sector of the light on Handnesholmen will lead through the fairway from a position 0.3 mile W of Hugneset, to within about 1 mile of the light.

Tomfjorden, which leads NE from the inner end of Nordre Asvaerfjorden, passes N of Tomma and joins Indreleia NE of **Kjerringskjeret** (66°20'N., 12°53'E.), a foul area marked by a light, situated 1.75 miles NNE of Tomma.

Odoyflua (66°21'N., 12°55'E.), a drying rock, lies at the SW entrance point of Stigfjorden, 1.5 miles NNE of Kjerringskjeret.

Stigfjorden, formed between Stigen on the W and Aldra on the E, is the N continuation of Indreleia to Bonetskjeret, 9 miles N, and is free from dangers in the fairway.

Teisten (66°22'N., 12°56'E.), a small islet on the W side of the fairway, lies 1.25 miles NNE of Odoyflua.

Aldersundet is entered E of Teisten; it is clear of dangers in the fairway. Aldra forms the W side of the passage; the E side of the passage is formed by the mainland. Three overhead cables span Aldersundet between Aldra and the mainland.

At the N end of Stigfjorden, the track of Indreleia passes W of three small islands, Brusoya, Rundvedoya and Langvedoya; it then leads E of **Bonetskjeret** (66°29'N., 12°58'E.), 1.5 miles NW of Langvedoya.

Kvina, an inlet entered off the E side of Indreleia, ENE of Rundvedoya, is free from dangers in the fairway.

Kvina (66°28'N., 13°10'E.), a village at the head of the inlet, has a jetty, with a berth 18m long, at its head; there are depths of 4.5 to 5.8m alongside.

7.47 From Bonetskjeret, Indreleia passes through Kvaroyfjorden, in a NNW direction; then it turns E passing N of **Vikingen Light** (66°32'N., 12°58'E.), and S of Rangundoya. A 14.9m patch lies in the SW entrance to Kvaroyfjorden, 0.35 mile NE of Bonetskjeret.

There is a 4.3m shoal patch on the E side of the fairway, 1.25 miles ENE of Bonetskjeret. A 10m patch lies 0.2 mile NW of the 4.3m depth.

After passing SE of Rangundoya, 3 miles NE of Vikingen Light, a vessel should steer N to pass between Rangundoya and Gjeroya on the W and the island of Renga located about 1 mile E.

Lamannskjeret (66°36'N., 13°05'E.), a reef, lies on the E side of the fairway, about 2 miles NNW of the S extremity of Renga. Other dangers, which may be seen on the chart, lie off the W side of Renga.

From abreast the N extremity of Renga, vessels should steer N through Rodoyfjorden, passing between Rodoya and the mainland.

Rodoy (66°39'N., 13°05'E.) is a small coastal harbor situated at the SE extremity of Rodoya. It may be entered from the S



Courtesy of Kystriksveien Reiseliv AS

Rodoy

through Rodoysundet. The timber quay is 31m long and has depths of 6.3 to 8.5m alongside; however, local knowledge is required.

Sandverken (66°39'N., 13°06'E.) lies on the W side of the fairway, 0.6 mile SE of Rodoy. Sorskallen, a 0.9m isolated patch, lies 0.2 mile SSW of Sandverken.

Ronvikskjerane (66°40'N., 13°11'E.), a group of above-water rocks on the E side of Indreleia, lies about 3 miles NE of Sandverken. Klauskeret, an above-water rock, is about 1 mile NNE of Ronvikskjerane, in about mid-channel of the entrance to Tjongsfjorden.

A mid-channel course through Rodoyfjorden leads clear of the dangers.

Svinvaer (66°45'N., 13°10'E.) is situated on the W side of Indreleia, 2.75 miles NNE of Rodoya. In the fairway between Svinvaer and Amnoya, 2.25 miles E, are two 14m shoals located, respectively, 0.8 mile E, and 1.25 miles E of the NE extremity of Svinvaer. A small islet lies 0.25 mile E of Svinvaer.

Meloyfjorden is entered between Svinvaer and Amnoya.

Meloyfjorden to Saltfjorden

7.48 Indreleia continues from the junction of Rodoyfjorden, Otervaerfjorden, and Skarsfjorden for 11 miles NNE and ENE through Meloyfjorden, then turning NE through Meloysundet. When clear of Meloysundet, Indreleia continues 7 miles NNW across Gasvaerfjorden and Stottfjorden to Stottsundet. This route is suitable for large vessels.

An entrance from seaward through Tennholmfjorden gives access to Indreleia through Gasvaerfjorden and Stottfjorden.

Angersholmen Light (66°46'N., 13°16'E.) is situated on the E side of the fairway, 0.35 mile off Amnoya.

Mefjordholmen, a group of islets and rocks, lies on the W side of the fairway, about 1 mile WNW of Angersholmen Light. A shoal, with a depth of 8m, is situated 1.25 miles NE of the light, on the SE side of the fairway.

Hatboen (66°48'N., 13°21'E.), marked by a beacon, is about 3 miles NE of Angersholmen Light on the N side of the fairway.

A mid-channel course will lead through Meloyfjorden, passing between the N extremity of Amnoya and Hatboen. Between Hatboen and Meloysund Light, 5 miles ENE, the fairway is free from dangers.

Glomfjorden, the E continuation of Meloyfjorden, extends 10.5 miles E from its entrance S of the Meloysund Light; the fairway is deep and free of dangers.

An overhead cable, with a vertical clearance of 42m, spans Glomfjorden, about 6 miles within its entrance.

Glomfjord (66°49'N., 13°59'E.) ([World Port Index No. 22540](#)) is situated on the N shore at the head of Glomfjorden.

A private bulk quay, about 317m, long will accommodate a vessel up to 15,000 dwt, with a draft of 8m.

The pilot boards, as follows:

1. North approach—2 miles N of Fleinvaer.
2. South approach—2 miles WNW of Asvaer Light.

7.49 Meloysundet, the continuation of Indreleia, is formed between Meloya on the W side and Skjaerpa on the E side.

Meloyneset Light (66°50'N., 13°35'E.) is situated on the E extremity of Meloya, 0.75 mile NE of Meloysund Light.

An overhead cable, with a vertical clearance of 60m, spans the S end of Meloysundet.

A white sector of Meloysund Light bearing astern, leads through the fairway of Meloysundet to the E end of Gasvaerfjorden.

Mesoya (66°51'N., 13°40'E.), an island 318m high, lies with its SW part 1 mile E of Meloya. It forms the E side of Mesoyfjorden; Eiet, formed on its E side, leads NNE from Glomfjorden.

Ornes (66°52'N., 13°42'E.) ([World Port Index No. 22520](#)) is situated on the mainland 0.45 mile E of the NE end of Mesoya. It is the administrative center for the Meloy district.

Ornes may be approached from the N by rounding the N end of Mesoya from Mesoyfjorden, or from the S through Glomfjorden then NNE through Eiet. The quays at the fish factories have a total length of 152m; the main quay has a depth of 5.2m alongside. The packet boat quay is 92m long, with depths of 4 to 9.7m alongside.

Indreleia route leads across Gasvaerfjorden, then passes through Stottsundet, between the Stottvaer group of islands and the mainland. Kunna, the conspicuous headland at the NE end of this stretch, lies with its seaward end about 7 miles NNW of Meloysundet.

From Kunna NE to Fugloyfjorden, a distance of about 5 miles, Indreleia is open sea sheltered by the low-lying **Gronna** (67°01'N., 13°10'E.) group of islets and rocks.

After entering Fugloyfjorden, the track continues in a general NE direction and passes SE of Fugloya; then the trend is N past the W side of Sandhornoya Island into Saltfjorden.

Caution.—During N gales, a heavy sea is raised on the bank N of Kunna. This part of Indreleia is considered to be one of the most difficult to navigate in bad weather and under such conditions the area should be avoided by vessels without local knowledge.

of **Marnesskagen** (67°10'N., 14°05'E.), at the junction with

7.50 Gasvaer (66°53'N., 13°29'E.) is a group of islands lying 3.25 miles NW of Meloysund Light. Teksmona, an island, lies on the E side of Indreleia, about 1 mile E of Gasvaer. The fairway in this area is free of danger; however, a 7.6m patch lies about 0.3 mile W of the W extremity of Teksmona.

Ostholmen (66°53'N., 13°31'E.) is the farthest E of the Gasvaer group. A reef, with some above-water rocks, extends about 0.3 mile SW from a point on the mainland 1.75 miles NNE of Ostholmen.

Stott (66°55'N., 13°28'E.) is the name for the general vicinity of Stottsundet and the island group Stottvaer.

Skarvskjer Light is situated close off the E side of Stott, 2.75 miles NNW of Ostholmen.

Stottsundet, formed between Stott and the mainland, is free of dangers except for Litlegrunnen, a 10m patch 0.9 mile N of Skarvskjer Light, and Bonetskjergrunnen, a 7m patch lying 0.35 mile farther NNW.

Tides—Currents.—Though much influenced by the wind, the tidal currents in Stottsundet have a tendency to set N with the rising tide and S with the falling tide. During or after fresh S or SW winds, the tidal currents may set continuously N.

A white sector of Skarvskjer Light, astern, leads N through the fairway of Stottsundet.

When clear of Stottsundet, vessels bound for Fugloyfjorden can alter course E, taking care to avoid the foul ground extending about 0.4 mile N from the N face of Kunna.

On the W side of the channel, from about 0.5 mile to 1.25 miles N of **Stott Light** (66°57'N., 13°28'E.), is a rocky shoal with a least depth of 7.6m. An 18.3m rocky patch lies in the channel about 0.7 mile NE of the light; on the N side of the fairway, about 2 miles NE of the light is Meloygrunnen, a 2.5m shoal. A 14.6m patch lies S of Meloygrunnen, in about mid-channel, between the shoal and Kunna.

A white sector of **Digerflesa Light** (66°58'N., 13°38'E.), leads between the coastal reef N of Kunna and the S end of Meloygrunnen, but it should be noted that the 14.6m patch lies in this sector. A white sector of Finneset Light, located 2.5 miles E of Digerflesa Light, ahead, leads through the same channel and S of Digerflesa.

7.51 From the vicinity of Meloygrunnen and Digerflesa, the track leads NE through Fugloyfjorden, passing SE of **Floholman** (67°01'N., 13°42'E.), and then passing between the E side of Fugloya and Rossoya, 1.75 miles E.

In Fugloyfjorden, the tidal currents are usually strong, setting N on the flood and S on the ebb; heavy overfalls occur during W and NW winds.

Fuglesangen (66°59'N., 13°38'E.), lying about 0.9 mile WNW of Digerflesa Light, consists of some above and below-water rocks which break in bad weather.

Above-water rocks lie on the E side of the fairway, about 0.4 mile off the W side of Rossoya.

Fugloya Light (67°04'N., 13°52'E.) is situated at the E end of Fugloya. A rock, with a depth of 5.2m, lies 1 mile N of the light.

From NE of Fugloya Light, Indreleia passes SE of Fleina, an island lying 1.25 miles N of Fugloya, and E of Sor-Arnoya and Nord-Arnoya and W of Veoya and Sandhornoya to the vicinity Saltfjorden.



Saltstraumen

A shore reef extends about 1 mile SE from Sor-Arnoya; the fairway narrows to about 0.4 mile in this area.

7.52 Sorfjorden, on the E side of Fugloyfjorden, is approached from its N end from Indreleia between Fugloya and Sandhornoya, 3.5 miles ENE. The fjord extends S for 7.75 miles and is formed between Rossoya and Femris and a peninsula of the mainland on the W and by a peninsula of the mainland on the E. It is free of danger in the fairway, but its inner part is icebound in the winter.

Stavsundet (67°01'N., 13°56'E.), formed between Femris and the mainland to the S, leads into Sorfjorden; it can be used by vessels up to 1,500 grt and 5.2m draft.

Rosoyundet, formed between Rosoya and Femris, connects Fugloyfjorden and Sorfjorden. This narrow passage has no known dangers in the fairway and can be used by vessels up to 11,000 grt and 7.9m draft.

Anchorage may be taken by vessels of moderate size, with local knowledge, in 20 to 40m, on the E side of Sorfjorden, 2.5 miles SE of the N extremity of Femris. Care must be taken to anchor close inshore as the depths increase rapidly to the W.

The W approach to Morsdalsfjorden from Indreleia is at the N end of Sorfjorden; the fjord proper lies between the mainland peninsula on the E side of Sorfjorden and the SW side of Sandhornoya. It extends about 6 miles SSE to the S end of Sandhornoya, and then Holmsundfjorden continues E and N to the S end of Nordfjorden.

Morsdalsfjorden is free from dangers, except for two rocky shoals, with depths of 5.5m and 8.5m, which lie 0.5 mile W and 0.4 mile N, respectively, of **Sundsodden Light** (67°05'N., 14°04'E.).

There is anchorage for moderate-size vessels, in a depth of 18.3m, on the W side of Morsdalsfjorden, about 0.4 mile SSE of Sundsodden Light. Vessels should get close under the land, as the depths increase rapidly offshore.

Saltfjorden, extending from **Fleinvaer** (67°10'N., 13°45'E.) to Hopen, 23 miles ENE is crossed by Indreleia. The E part of Saltfjorden is entered between **Skarneset** (67°12'N., 14°17'E.), the N point of Sandhornoya, and Kvannoya, 3.25 miles NNE. It gives access to Nordfjorden and through Saltstraumen to Skjerstadfjorden and other inner fjords.

This part of Saltfjorden is deep and wide and is free of dangers, though coastal reefs fringe each side; it is exposed to seaward.

The tidal currents in the E part of Saltfjorden are strong; they are usually E along the S shore and W along the N shore.

A mid-channel course in a NE direction will lead through Saltfjorden to the entrance of Saltstraumen.

7.53 Saltstraumen, a narrow channel on the S side of the inner end of Saltfjorden, is entered between **Kvitberget** (67°14'N., 14°36'E.), the NE extremity of Straumoya, and the NW point of Knaplundoya, 0.45 mile NE. This channel leads to the fjords E, which are collectively known as Indre Saltfjorden.

A bridge, with a vertical clearance of 41m over a navigable width of 80m, spans Saltstraumen.

Overhead cables span Saltstraumen; the least vertical clearance is 32m.

Winds—Weather.—With W winds, the flow is irregular, and slack water may occur up to 1 hour earlier or later than usual.

In springtime, with E winds and with the rivers in flood, the beginning of the N current is advanced,; that current may run for 7 hours, and the S current for only 5 hours.

Tides—Currents.—Skjerstadjorden and its branch fjords are filled and emptied by semidiurnal tides through two narrow openings. These openings so restrict the volume of water that can pass, as to cause:

1. A substantial difference between the outer and inner levels.
2. Very strong tidal currents, especially in Saltstraumen.
3. A delay of about 1 hour 45 minutes in the times of HW and LW within.

In Saltstraumen generally, the spring rate of the tidal current is at least 3 knots, but attains 7.5 to 8.5 knots, and considerably more in extreme conditions, in the narrows abreast Storholmen.

Tidal intervals in Saltstraumen are shown below:

HW at Narvik	Remarks
-5 hours, 50 minutes	LW at N entrance
-4 hours, 10 minutes	LW at S entrance
-3 hours, 55 minutes	Slack water
-0 hours, 10 minutes	HW at N entrance
+1 hour, 25 minutes	HW at S entrance
+2 hours, 00 minutes	Slack water

Vigorous eddies, several meters wide and with markedly deep vortices, form when the flow is strong.

During the S current, eddies form between the S point of Storholmen and Tuv, 0.7 mile SE; on the S shore of Svefjorden; and beyond. They are strongest in the basin formed by Storholmen and the cove 0.2 mile E.

In that basin, the S current sets strongly towards the S point of Storholmen, then ESE towards Ripnespynten 0.2 mile ESE. During the S current, eddies do not form along the coast of Knaplundoya, SE and E of Ripnespynten.

During the N current, eddies form between the N point of Storholmen and the N entrance to Saltstraumen; the strongest eddies are off Storholmen. The currents which set on to the projecting points of Storholmen and Knaplundoya, beneath the bridge, cause an easily-visible ridge to form in the water, this extending 0.5 mile NNW to Kvitberget, the NW entrance point of Saltstraumen.

In Svefjorden, the incoming tidal current at the surface is the stronger, and can set up unpleasant overfalls in opposition to a strong E wind.

The strength of the tidal current and the powerful eddies in their wake cause Saltstraumen to be navigable only at brief periods of slack water and then only with local knowledge.

Signals.—Saltstraumen Signal Stations, which inform vessels when the passage of Saltstraumen may be made, are situated, as follows:

1. For incoming vessels—on the E shore, by the King Oscar II statue 0.3 mile N of the bridge.
2. For outgoing vessels—at Ytre Tuv, 0.7 mile SSE of the bridge, on the S shore of Svefjorden.
3. Signals are shown from masts (yellow and white) and consist of red balls by day and red lights by night.

Saltstraumen Signal Stations are manned 1 hour before and after each current change within the period 0800 to 1900. A watch is maintained on VHF channels 14 and 16.

Information on times of transit through the Saltstraumen passage can be obtained by telephone on the 24-hour information service 08-18-77-00.

Mariners are held responsible for meeting the passage schedule and any other required conditions. Local regulations state that to avoid passing situations in the narrows, vessels with the current running against them should wait.

Anchorage.—Vessels proceeding to Saltstraumen can obtain anchorage, in depths of 20 to 29m, N of the W entrance point of Saltstraumen, but care must be taken to avoid the reef fringing Straumoya.

7.54 Svefjorden continues ESE from the S entrance of Saltstraumen; it is free of dangers in mid-channel. An overhead cable spans Svefjorden 1 mile E of its entrance.

Skjerstadjorden is entered from Svefjorden abreast **Buneset** (67°13'N., 14°42'E.) and extends to **Gjelbuneset** (67°11'N., 15°24'E.) 16 miles E, on the S side of the fjord. From this point Saltdalsfjorden extends 5 miles farther SSE.

As in Svefjorden, the incoming tidal current at the surface is the stronger, and can set up unpleasant overfalls in opposition to strong E winds. These conditions are particularly dangerous in Skjerstadjorden, which is liable to squalls. Squalls often develop suddenly and are generally followed by periods of calm.

The white sector of the light on Buneset, bearing astern, leads in the fairway towards position about 3 miles NE of the light. The white sector of **Alvnestangen Light** (67°16'N., 15°02'E.) leads E in the fairway, passing N of Oygrunnane, an area of foul ground which extends about 1 mile N of the S shore.

From a position about 1 mile W of Alvnestangen Light a SE course will lead through the E part of Skjerstadjorden to Gjelbuneset.

Fauske (67°16'N., 15°24'E.) ([World Port Index No. 22320](#)) lies at the head of Fauskevika, which is entered 7 miles SE of Alvnestangen Light; this is the administrative center for the surrounding district.

There is a stone and concrete quay here, 39m long, with depths of 4.2 to 7.2m alongside.

Finneid, about 1 mile E of Fauske, has a quay 126m long, with depths of 5.2 to 11m alongside.

Rognan (67°06'N., 15°25'E.) ([World Port Index No. 22350](#)) lies at the head of Saltdalsfjorden, which extends 5 miles S from its entrance abreast Gjelbuneset; it is the administrative center for Saltdal district.

Berths are available in Rognan, at quays up to 130m long, with depths of 3.4 to 10m alongside. Anchorage is available in 21m, clay and sand, in a position about 0.3 mile WNW of Rognan Church.

Donna to Saltfjorden

7.55 Indreleia may be reached from seaward by passing S of the S end of **Traena** (66°25'N., 12°00'E.), then proceeding across the S part of Traenfjorden, into the W arm of Sjona, then toward the S end of Stigfjorden. Traenfjorden is the fjord next N of Nordre Asvaerfjorden.

Traenfjorden, which lies in a NNE to SSW direction, is bound on the W by the Traena group and on the E by Mavaer and Nesoya. The navigable channel is about 4 miles wide at its entrance and about 3 miles wide between **Selvaer** (66°36'N., 12°18'E.) and the dangers W of Nesoya.

Tides—Currents.—In Traenfjorden the tidal currents set N and NE with the rising tide and S and SW with the falling tide.

When bound from the S end of Traenfjorden to Indreleia, a vessel should steer ENE passing between **Samskallen** (66°22'N., 11°58'E.) and Ovsikallen, 2.25 miles N, and pass N of **Kvalholmen Light** (66°25'N., 12°28'E.); from this position the track leads about 0.5 mile N of Kvitingan, which lies 3.25 miles ESE of the light.

Indre Solvaerrevet (66°24'N., 12°41'E.), an isolated patch with a charted depth of 5.8m, lies about 2 miles E of the light on Kvitingan. Other dangers in this area may best be seen on the chart.

From the vicinity of Kvitingan, steer toward Eggelosa, passing S of Indre Solvaerrevet. A vessel can steer from Eggelosa SE between Onoya and Kvitaer into Sjona and then into Indreleia.

The dangers in Sjona and the vicinity may best be seen on the chart.

Although there are several different ways through and across Traenfjorden, care should be taken to avoid **Stokholmen** (66°29'N., 12°21'E.), 4.75 miles NNW of Kvalholmen Light, and the shoals which are charted within 1.75 miles.

Vessels may proceed N from a position N of Kvalholmen Light, passing in mid-channel between Skjaerflesa Light and Stokholmen, steering to pass W of **Asbraken** (66°30'N., 12°32'E.), a foul area 3 miles E of Stokholmen.

From a mid-channel position E of Dorvaer, 4 miles NNW of Stokholmen, a deep fairway leads N toward the W end of Lyngvaerfjorden passing between the many dangers charted off Traena and Nesoya.

7.56 Lyngvaerfjorden, N of Traenfjorden, is broad and deep and separates Traena from **Myken** (66°46'N., 12°29'E.).

Valvaerfjorden lies E of Valvaer, the island group close NE of Myken. This fjord is encumbered by a large number of rocky shoals; navigation is dangerous without local knowledge.

Tennholm fjorden, 16 miles NE of Lyngvaerfjorden, is entered S of **Kalsholmen Light** (66°55'N., 13°06'E.). The fjord is free from dangers but Lyjosboen, a reef with less than 1.8m lies in the W approach 6 miles SW of Kalsholmen Light, and

Sveboen, a reef with a least depth of 4.6m, lies 5.5 miles WSW of the light.

Stapfjorden leads N from the inner end of Tennholm fjorden, along the W side of the **Stottvaer** (66°56'N., 13°20'E.). The fairway of this fjord is free from dangers.

7.57 Fleinvaerfjorden, leading NE into Saltenfjorden, is deep and free from dangers in the fairway. Fleinvaer, a group of low islands, lies on the NW side of Fleinvaerfjorden. Fuglovaer, Fleina, Sor Arnoya, and Nord Arnoya lie on the SW and SE side of the fjord.

Nupen (67°08'N., 13°43'E.) is the farthest S of the Fleinvaer group. The most dangerous shoals in the approach to Fleinvaerfjorden extend 4 miles W of Nupen. Other shoals lie off Fleinvaer; their positions may be seen on the chart.

The outer dangers in the approach are usually indicated by the great number of sea birds seen in their vicinity.

A vessel approaching Fleinvaerfjorden, when in the vicinity of **Gronna** (67°01'N., 13°11'E.), should steer well N of that group. When clear N of Gronna, steer ENE, passing S of Nupen, then in mid-channel to join Saltfjorden NE of Nord Arnoya.

The principal channel to Bodo, in this area, is the one which leads S of **Tennholmen** (67°18'N., 13°30'E.), then N of Fleinvaer into Saltfjorden in approximate position 67°12'N., 14°08'E.; this is specified for entrance into the Restricted Sea Area.

Tides—Currents.—Tidal currents around Tennholmen are rotary. At local LW, the current begins to run SW, changing gradually through W, NW, and N as the tide rises.; at local HW, the current begins to run NE, changing gradually through E, SE, and S as the tide falls.

7.58 Tennholmen lies about 20 miles W of Bodo and about 9 miles NW of Fleinvaer.

Seioskallen (67°17'N., 13°31'E.), a shoal with a least charted depth of 7m, lies about 2 miles SSE of the light on Tennholmen. A shoal, with a depth of 15.9m, lies 0.25 mile SW of Seioskallen. This is the farthest S of the dangers off Tennholmen.

For dangers E of Tennholmen and the dangers in the vicinity of Givaer, 5 miles E of Tennholmen, refer to the chart.

From a position clear of Seioskallen, the entrance channel passes midway between Fleinvaer and Kjaervaer, 3 miles NE, then into the W end of Saltfjorden.

Mesjoygrunnen (67°12'N., 13°59'E.), with a least charted depth of 4.6m, lies about 1.0 mile SE of the light in Kjaervaer.

7.59 Indreleia crosses Saltfjorden from Marnesskagen to the vicinity of **Store Svartoksen** (67°16'N., 14°14'E.), 7 miles NE, where the route divides.

Svartoksleia, the principal channel into Bodo, leads N of Store Svartoksen and S of Store Hjartoy and Lille Hjartoy.

A line of shoals extend ENE from Store Svartoksen.

Kirkgrunnen (67°15'N., 14°14'E.), a small patch with a depth of 1.5m, lies about 0.4 mile SW of the light on Store Svartoksen.

Lille Svartoksen, a drying reef, lies on the N side of Svartoksleia, 1 mile NE of Store Svartoksen.



Bodo

In Saltfjorden, vessels should steer in the white sector of Store Svartoksen Light bearing between 036° and 062° , ahead, to within about 1 mile of the light, when the vessel should steer to pass W and N of the light.

When N of Store Svartoksen, steer to pass between Lille Svartoksen and Langdragan, 0.45 mile ESE, then into the entrance of Bodo.

Care should be exercised to avoid the shoal spit extending 91m SW from the SW extremity of Nyholmen and a shoal spit extending 137m E from the molehead, in the entrance to Bodo.

Bodo ($67^{\circ}17'N.$, $14^{\circ}23'E.$)

[World Port Index No. 22290](#)

7.60 Bodo, a coastal natural harbor, is formed between Nyholmen and the Buroya peninsula on the NW side, and the mainland on the NE and SE side. A mole extends about 0.2 mile NNW from the mainland toward the SW extremity of Nyholmen. Nyholmen and Buroya are connected by a causeway and a bridge.

Bodo is the administrative center for the county of Nordland.

Winds—Weather.—The prevailing wind at Bodo is from the E, except in summer, when winds are mainly from N and E or



Courtesy of Kystriksyeien Reisseliv AS

Bodo Bridge

between SW and W. Calms often occur from July to September. Gales and strong winds blow mostly from SW and W.

The inner harbor is well sheltered from most directions, but it is reported that bad weather from SW or W can cause

occasional delays in berthing or unberthing in the absence of tug assistance. The harbor is always ice free.

The outer harbor consists of the water area between the town and the SW part of Lille Hjartoy, SW of the mole; it is exposed to SW and W.

Tides—Currents.—The tidal rise at MHWS is 2.8m; the tidal rise at MLWS is 0.4m.

Depths—Limitations.—The public quay has a length of 1,000m, with depths from 3 to 6.7m alongside. The railroad quay is 250m long on its N side, with depths of 5.5 to 7.5m alongside. There are two tanker berths, about 60m, long with depths of 9.7m alongside.

Vessels up to 15,000 dwt, 150m in length, and 10.6m draft can be accommodated. A 250m quay, with a depth of 9m alongside, has been constructed in Ronvik at the head of the inner harbor.

Aspect.—The framework radio masts, E of the root of the mole, are conspicuous. Bodo Church is a prominent yellow building, with a separate belltower surmounted by a spire at its W end.

Pilotage.—Pilotage from the sea to Bodo is reported as compulsory. The pilot boards 2 miles N of Fleinvær. By prior arrangement, the pilot may also board 1 mile NNW of Landegode Light or 1 mile SW of Stor Svartoksen Light.

Harbor pilotage is not compulsory but is available with 24 hours notice; the harbor pilot embarks outside the mole. The pilot boat and pilot office are equipped with VHF channel 16.

Bodo Seaplane Harbor comprises the area E of Store Hjartoy, between a line joining the N extremity of that island and a point on the mainland about 1.0 mile ESE, and a line joining Hjartoydragan, off the SW coast of Store Hjartoy, and a point on the mainland about 1 mile SSE.

When flying is in progress and the area is closed to water traffic, a ball painted in yellow and black checks is hoisted at a signal mast on a tower near Breidvikholmen, close SW of the head of the mole.

Anchorage.—Large vessels may anchor outside the breakwater, in depths up to 49m. In the harbor basin, vessels up to 18,000 dwt may enter and anchor, in depths of 22 to 26m, good holding ground.

Anchoring is usually advised by the sea pilot or the harbor pilot.